

COMMUNITY AFFAIRS

Division Of Codes And Standards

Uniform Construction Code

Building, Plumbing, Fire Protection, Energy, Mechanical, and Fuel Gas Subcodes

Proposed Amendments: N.J.A.C. 5:23-3.14, 3.15, 3.17, 3.18, 3.20, 3.21, and 3.22

Authorized by: Susan Bass Levin, Commissioner, Department of Community Affairs

Authority: N.J.S.A. 52:27D-124

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

Proposal Number: PRN 2006-

Submit written comments by: November 4, 2006 to:

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SUSAN BASS LEVIN
COMMISSIONER

The agency proposal follows:

Summary

Under the State Uniform Construction Code (UCC) Act, the Commissioner of the Department of Community Affairs is charged with adopting model codes as part of the

Uniform Construction Code (UCC). P.L. 1996, c.53 amended the UCC Act to give the Commissioner “the authority to limit the adoption of later versions of the model codes to include only those standards in effect on July 1, 1995 and any later versions or amendments of model codes which would not be inconsistent with the purpose of the Act.” In May 2003, the Department adopted revisions to the 2000 editions of the International Building Code (IBC) and International Residential Code (IRC) as the building subcode of the UCC. In January 2005, the Department adopted revisions to the 2003 editions of the National Standard Plumbing Code (NSPC), International Mechanical Code (IMC), and International Fuel Gas Code (IFGC) as the plumbing, mechanical, and fuel gas subcodes of the UCC.

In order to implement the most recent published standards, the Department is proposing to adopt the 2006 editions of the IBC, IRC, NSPC, IMC, and IFGC to update the building, plumbing, mechanical, and fuel gas subcodes of the UCC. The proposed amendments reflect the modifications to the IBC/2006, IRC/2006, NSPC/2006, IMC/2006, and IFGC/2006 the Department is proposing to adopt, which have been reviewed by the Uniform Construction Code Advisory Board and its subcode committees.

The Department is also proposing to adopt revisions to the most recent model energy codes, which is in keeping with Governor Corzine’s recent Executive Order (EO 11) to increase energy efficiency in New Jersey and to preserve the State’s natural resources. The current energy subcode of the UCC is based on the 1995 edition of the Council of American Building Officials Model Energy Code (CABO MEC/1995) for low-rise residential construction, which relies on the 1999 edition of the American

Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1 standard for commercial and all other construction. The proposed amendments would adopt the 2006 edition of the International Energy Conservation Code (IECC/2006) and its referenced standard, the 2004 edition of ASHRAE 90.1.

The IECC/2006 includes energy conservation requirements that are based on model code changes submitted by the United States Department of Energy (US DOE). While the US DOE's code changes intend to simplify the application of energy requirements, the code changes result in two significant implications for New Jersey. The Department's proposed modifications to the IECC/2006 and ASHRAE 90.1/2004 would address the energy concerns for New Jersey, while incorporating the IECC/2006's upgrades in energy conservation requirements.

The first concern for New Jersey resulting from the US DOE's model code changes involves the division of the State into climate zones. The IECC/2006 and ASHRAE 90.1/2004 have placed New Jersey into two climate zones (Zone 4A and Zone 5) as opposed to three climate zones under CABO MEC/1995 as amended by New Jersey. Zone 5, which covers the northern half of the State, extends from Mercer County to Sussex County. The remainder of the State falls under Climate Zone 4A. At the national level, this change was billed as a simplification. However, the requirements for Climate Zones 4A and 5 exceed what is practical based on actual climate data for the State from the National Oceanic and Atmospheric Administration (NOAA). The proposed amendments would replace Climate Zones 4 and 5 with four climate zones that are based on true heating degree-days drawn from NOAA data.

The second concern resulting from the US DOE's model code changes involves

the elimination of the window to wall ratio (percentage of glazing values). The IECC/2006 establishes separate minimum performance values for fenestration (windows, skylights and doors) and walls, which eliminates restrictions on amounts of glazing that can be applied. The change to the IECC to require performance values for fenestration and walls was intended to eliminate problems for small homes with a large percentage of glazing. However, the application of the performance values for individual building components yields less restrictive wall insulation requirements for homes with a higher percentage of glazing. The effect is that the greater the number of windows installed, the lower the energy requirements for walls, which means that smaller homes with fewer windows will be required to provide more energy conservation than larger homes with more windows. To correct this problem, the proposed amendments would assign a value for the window to wall ratio.

Finally, the proposed amendments would delete the commercial building section of the IECC/2006 in favor of ASHRAE 90.1/2004.

The following is a section-by-section summary of the proposed amendments:

Building Subcode (IBC/2006)

1. At **N.J.A.C. 5:23-3.14**, section numbers and titles of sections have been updated, which is necessary as a result of the proposed adoption of the IBC/2006.
2. At **N.J.A.C. 5:23-3.14(a)1**, the amendment would propose the adoption of the IBC/2006 as the building subcode of the UCC. At **N.J.A.C. 5:23-3.14(a)1ii**, the

proposed amendment would make a companion change to update the reference to the 2006 edition of the IBC. In addition, at **N.J.A.C. 5:23-3.14(a)2**, the proposed amendment would make a correction to the title of the International Code Council American National Standard Institute (ICC/ANSI) A117.1 standard, which is the technical design standard for accessible construction.

3. At **N.J.A.C. 5:23-3.14(b)1i**, the proposed amendment to Section 308.2, entitled “Group I-1;” Section 308.3, entitled “Group I-3;” Section 308.5, entitled “Group I-4, daycare facilities;” Section 310.1, entitled “Residential Group R;” and to Exception 3 of Section 1704.1 of the IBC/2006, entitled “General,” would delete references to Section 101.2 of the IBC/2006, entitled “Scope.” In the current building subcode, referenced sections of Chapter 1 are replaced with “the administrative provisions of the Uniform Construction Code (N.J.A.C. 5:23).” The Department is proposing that in Section 308.2, Section 308.3, Section 308.5, Section 310.1 and in Exception 3 of Section 1704.1, the references to Section 101.2 be deleted as unnecessary.

4. At **N.J.A.C. 5:23-3.14(b)2vii and (b)2viii**, the proposal would make a grammatical correction and would reformat the amendment to the definition of “dwelling unit.” In the current building subcode, the definition of “dwelling unit” is included with the residential definitions (Section 310.2, Definitions). In the IBC/2006, the definition has been moved to Chapter 2. Therefore, the Department is proposing to reformat the amendment to the definition of “dwelling unit” to place it under the correct chapter. A companion change would be made at **N.J.A.C. 5:23-3.14(b)2ix** to reformat the amendments to the definition of “historic building” and “jurisdiction.”

5. At **N.J.A.C. 5:23-3.14(b)3**, the proposal would delete the amendment to Section

302.3.3, entitled “Separated uses.” In the IBC/2006, the requirements for separated uses are contained in Section 406.1.4, entitled “Separation.” Therefore, the amendment to Section 302.3.3 is no longer necessary. In addition, in the same section, the proposal would make a companion change to delete the amendment to Table 302.3.3, entitled “Required Separation of Occupancies (Hours)^a,” because the table has been moved to Section 508 of the IBC/2006, entitled “Mixed use and occupancy.” (See Item 13)

6. At **N.J.A.C. 5:23-3.14(b)3i, (b)3ii, and (b)3iv**, the proposed amendments to Section 308.2, entitled “Group I-1,” Section 308.3, entitled “Group I-2,” and Section 308.5.1 of the IBC/2006, entitled “Adult care facility,” would delete the references to the 1997 edition of the National Fire Protection Association (NFPA) 101 standard (the Life Safety Code) because NFPA 101-97 is no longer available. In addition, the Department is proposing to include the definitions for prompt, slow, and impractical evacuation from NFPA 101-97 in the building subcode as appropriate.

7. At **N.J.A.C. 5:23-3.14(b)3vi**, the proposal would revise the amendments to the residential definitions of Group R-1 and Group R-2 in the current building subcode to include “sleeping units” for consistency with the residential definitions in the IBC/2006. In addition, because the list of R-2 occupancies in the IBC/2006 includes hotels (non transient), motels (non transient), and vacation timeshare properties, the Department is proposing to add those occupancies to the building subcode for consistency.

8. At **N.J.A.C. 5:23-3.14(b)3vi(4)**, the proposed amendment to the residential definition of Group R-4 would replace the reference to NFPA 101-97 with the definition of prompt evacuation. (See Item 6)

9. At **N.J.A.C. 5:23-3.14(b)4**, the proposal would delete the amendment to the definition

of “dwelling unit,” which is proposed to be moved in accordance with changes to the IBC/2006. (See Item 4)

10. At **N.J.A.C. 5:23-3.14(b)4v**, the proposal would amend the definition of “single residential occupancy” to clarify that in order for an occupancy to be considered a single residential occupancy, the residency status for the building must qualify as non-transient.

11. At **N.J.A.C. 5:23-3.14(b)4vi**, the proposal would amend the definition of “therapeutic residence” to delete the reference to NFPA 101-97 and to include a description of prompt evacuation. (See Item 6)

12. At **N.J.A.C. 5:23-3.14(b)5ii**, the proposed amendment to Section 403.11 of the IBC/2006, entitled “Emergency power systems,” would replace a reference to a section contained in Chapter 27 of the IBC/2006, entitled “Electrical,” with a reference to the electrical subcode of the UCC (N.J.A.C. 5:23-3.16), which contains requirements for electrical work performed in New Jersey. Similar amendments to replace references to sections that have been deleted with references to the appropriate subcodes of the UCC have been made throughout the proposal to adopt the IBC/2006. (See N.J.A.C. 5:23-3.14(b)5v, vi, vii, viii, ix; (b)9vii, 9xxxiv, 9xl; (b)10iv, 10vii, 10xi; (b)14i and 14ii; (b)21iii; and (b)24ii.)

13. At **N.J.A.C. 5:23-3.14(b)5iii**, the proposed amendment to Section 406.1.4 of the IBC/2006, entitled “Separation,” would delete the separation requirements for private garages located beneath living spaces and would retain the separation requirements from the current building subcode. Section 406.1.4 of the IBC/2006 requires a one-hour separation rating, which is provided by one layer of 5/8-inch Type X gypsum board. Formal Technical Opinion (FTO) – 13 also requires a one-hour separation rating, but

specifies that it be applied to structural members. Therefore, the Department is proposing to retain the current building subcode's separation requirements for private garages located beneath living spaces to maintain the current level of protection for building occupants.

14. At **N.J.A.C. 5:23-3.14(b)6i(9), 6i(10), 6i(11), and 6i(12)**, the proposal would amend Table 503 of the building subcode, entitled "Allowable Height and Building Areas," for Group H2, Group H3, and Group H4 occupancies of Type 1A construction and would insert height limitations from the 1996 edition of the Building Officials and Code Administrators National Building Code (BOCA/1996). In addition, the proposal would insert a height limitation for Group I-3 occupancies of Type VA construction from BOCA/1996. In the adoption of the current building subcode, Table 503 was amended to retain the height limitations from BOCA/1996. Because height limitations for Group H-2, Group H-3, and Group H-4 occupancies of Type 1A construction and Group I-3 occupancies of Type VA construction were omitted from Table 503 inadvertently, the Department is proposing to insert height limitations that are consistent BOCA. At **N.J.A.C. 5:23-3.14(b)6i(17)**, the proposal would delete the amendment to Table 503 to include a height limitation of two stories for Group R-4 occupancies of Type VB construction. Because the IBC/2006 contains a height limitation of two stories, the amendment is no longer necessary. Finally, at **N.J.A.C. 5:23-3.15(b)6i(21)**, the proposal would delete the amendment to define the acronym "NP;" Table 503 in the IBC/2006 now contains a description of the acronym.

15. At **N.J.A.C. 5:23-3.14(b)6ii**, the proposed amendment to Section 505.4 of the IBC/2006, entitled "Openness," would delete Exception 5 in its entirety. Exception 5 is

based on provisions contained in Exceptions 8 and 9 of Section 1020.1, entitled “Vertical exit enclosures.” Because Exceptions 8 and 9 in Section 1020.1 are proposed for deletion, Exception 5 in Section 505.4 must also be deleted. Therefore, the Department is proposing that the requirements contained in Exception 5 of Section 505.4 of the IBC/2006 be deleted. (See Item 19)

16. At **N.J.A.C. 5:23-3.14(b)6v**, the proposal would amend Table 508.3 of the IBC/2006, entitled “Required Separation of Occupancies (Hours),” to delete the reference to Group U (utility and miscellaneous structures). The IBC/2006 establishes requirements for Group U structures that are accessory to a residential occupancy. Similar requirements were deleted from the current building subcode because the group determination results in code requirements that are excessive. Therefore, the Department is proposing to retain the requirements of the current building subcode applicable to utility and miscellaneous structures.

17. At **N.J.A.C. 5:23-3.14(b)7ii**, the proposed amendment to Section 602.3 of the IBC/2006, entitled “Type III,” would insert a cross-reference to Formal Technical Opinion (FTO) - 14 for requirements for materials that are allowed to be installed in exterior walls of Type III construction and would clarify that the second sentence of Section 602.3, as opposed to the last sentence of the section, is deleted.

18. At **N.J.A.C. 5:23-3.14(b)8ii**, the proposed amendment would clarify that Section 705.5 of the IBC/2006, entitled “Horizontal continuity,” and its corresponding subsections are deleted. The proposed amendment would eliminate confusion by specifying that Section 705.5, Section 705.5.1, entitled “Exterior walls,” and Section 705.5.2 of the IBC/2006, entitled “Horizontal projecting elements,” are deleted in their

entirety.

19. At **N.J.A.C. 5:23-3.14(b)8iii**, the proposed amendment would delete Exception 11 in Section 707.2 of the IBC/2006, entitled “Shaft enclosure required.” Exception 11 references Exceptions 8 and 9 in Section 1020.1, entitled “Enclosures required,” which are deleted. Because Exceptions 8 and 9 are deleted, Exception 11 must also be deleted. Therefore, the Department is proposing that the requirements contained in Exception 11 of Section 707.2 of the IBC/2006 be deleted.

20. At **N.J.A.C. 5:23-3.14(b)8v**, the proposed amendment would delete Section 707.14.2 of the IBC/2006, entitled “Enclosed elevator lobby pressurization alternative.” Section 707.14.2 allows the installation of pressurized elevator hoistways as an alternative to providing pressurized elevator lobbies. The installation of pressurized elevator hoistways in lieu of pressurized elevator lobbies would reduce the level of protection for building occupants. Therefore, the Department is proposing that Section 707.14.2 of the IBC/2006 be deleted to maintain the current level of life safety.

21. At **N.J.A.C. 5:23-3.14(b)9i**, the proposed amendment to Section 903.1.1 of the IBC/2006, entitled “Alternative protection,” would replace “fire code official” with “fire protection subcode official.” In New Jersey, fire protection subcode officials have the responsibility of enforcing the requirements of the fire protection subcode of the UCC (N.J.A.C. 5:23-3.17). Therefore, the Department is proposing to include the correct title for code officials who enforce the requirements of the fire protection subcode. Similar amendments to replace references to fire code officials with references to fire protection subcode officials have been made throughout the proposal to adopt the IBC/2006. (See N.J.A.C. 5:23-3.14(b)9viii, (b)9ix, (b)9xi, (b)9xvi, (b)9xviii, (b)9xxii, (b)9xxiii, (b)9xxv,

(b)9xxvi, (b)9xxvii, (b)9xxviii, (b)9xxix, (b)9xxx, (b)9xxxii, and (b)9xxxiii.)

22. At **N.J.A.C. 5:23-3.14(b)9ii**, the proposed amendment would insert new Section 903.1.2 of the IBC/2006, entitled “Residential systems,” to provide requirements for residential sprinkler systems. The proposed amendment would retain language from the current building subcode specifying that NFPA 13D (Group R-3 (single-family detached)) and 13R (residential) sprinkler systems are not recognized for the purpose of exceptions or reductions unless specifically allowed by the code.

23. The proposal would delete the amendment to the Group R-2 sprinkler exceptions contained in Section 903.2.8 of the building subcode, entitled “Group R-2,” because the IBC/2006 requires all residential structures designed and constructed in accordance with the IBC to be equipped with sprinklers. Therefore, the amendment to Section 903.2.8 is no longer necessary.

24. The proposal would delete the amendment to Section 903.2.9 of the building subcode, entitled “Group R-4,” because the reference has been omitted in the IBC/2006. Therefore, the amendment to Section 903.2.9 is no longer necessary.

25. At **N.J.A.C. 5:23-3.14(b)9vi**, the proposed amendment would delete Section 903.3.1.2.1 of the IBC/2006, entitled “Balconies and decks,” in its entirety. Section 903.3.1.2.1 requires sprinkler protection for balconies, decks, and ground floor patios for dwellings of Type V construction. The requirements of Section 903.3.1.2.1 are based on statistics on fires caused by outdoor cooking equipment (barbecue grills). Because the Uniform Fire Code (UFC) prohibits outdoor cooking equipment in proximity to buildings, the Department believes that requiring sprinklers for balconies and decks is not necessary. Enforcement of the UFC lowers the risk of fire hazard, thereby eliminating

the need for sprinklers. Therefore, the Department is proposing to delete the requirements for sprinkler protection for balconies and decks for dwellings of Type V construction in Section 903.3.1.2.1 of the IBC/2006.

26. At **N.J.A.C. 5:23-3.14(b)9ix**, the proposed amendment to Section 903.4.1 of the IBC/2006, entitled “Signals,” would delete the option that allows alarm, supervisory, or trouble signals to sound audible signals at constantly attended locations. Section 903.4.1 requires an alarm signal to be transmitted to a central station, a remote supervisory station, or to a proprietary supervising station. It is not possible for a code official to enforce the requirement for constant attendance and the UCC’s variation process addresses those instances when an audible signal may be transmitted to an attended location. Therefore, the Department is proposing to delete the allowance for an alarm to trigger audible signals at constantly attended locations in Section 903.4.1 of the IBC/2006.

27. At **N.J.A.C. 5:23-3.14(b)9xiii and (b)9xiv**, the proposed amendments would insert new Section 905.3.2 of the IBC/2006, entitled “Building area,” to include the current building subcode requirements for the installation of standpipes based on building area and distance (buildings greater than 10,000 square feet in area with a travel distance to vehicle access of greater than 200 feet). The requirements for the installation of standpipes from the current building subcode are being retained to ensure that large volume buildings have adequate interior standpipe connections; this will ensure the continuation of effective and safe fire fighting conditions and operations. In addition, the proposed amendments would reformat the remaining subsections of Section 905.3 to place the sections in the correct sequential order.

28. The proposal would delete the amendments to Section 906 of the building subcode, entitled “Fire Department Connections,” and would propose the adoption of Section 906 of the IBC/2006, entitled “Portable Fire Extinguishers,” to provide for consistency between the UCC and the UFC and to address the placement of portable fire extinguishers during the design and construction phase rather than once construction is completed. In the IBC/2006, the requirements for fire department connections are contained in Section 912, entitled “Fire Department Connections.”

29. At **N.J.A.C. 5:23-3.14(b)9xix and (b)9xx**, the proposed amendments to Section 907.2.6, entitled “Group I,” and Section 907.2.8 of the IBC/2006, entitled “Group R-1,” would incorporate requirements from the fire protection subcode of the UCC (N.J.A.C. 5:23-3.17) for the activation of alarms by single smoke detectors with a modification to eliminate the option of installing two cross-zoned smoke detectors. Alarm verification smoke detectors are readily available on the market.

30. At **N.J.A.C. 5:23-3.15(b)9xxi**, the proposed amendment to Section 907.2.10 of the IBC/2006, entitled “Single- and multiple-station smoke alarms,” would include a requirement to allow the installation of household fire alarm systems that include smoke alarms or a combination of smoke detectors and audible notification devices to provide for consistency between the IBC/2006 and the IRC/2006.

31. At **N.J.A.C. 5:23-3.14(b)9xxiv**, the proposed amendment would delete Section 907.9.1.2 of the IBC/2006, entitled “Employee work area,” because the requirements of the section exceed the Americans with Disabilities Act and the Barrier Free Subcode of the UCC (N.J.A.C. 5:23-7).

32. The proposal would delete the amendments to Section 907.2.10.1.4, entitled

“Additions, alterations, or repairs to Group R,” and Section 907.2.10.3 of the building subcode, entitled “Interconnections,” because the sections have been omitted in the IBC/2006.

33. At **N.J.A.C. 5:23-3.14(b)9xxxi**, the proposed amendment to Section 909.18.8.3 of the IBC/2006, entitled “Reports,” clarifies the text that is proposed for deletion.

34. At **N.J.A.C. 5:23-3.14(b)9xxxv, (b)9xxxvi, (b)9xxxvii, (b)9xxxviii, and (b)9xxxix**, the proposed amendments to Section 912 of the IBC/2006, entitled “Fire Department Connections,” would retain the current building subcode requirements for fire department connections. (See Item 28)

35. At **N.J.A.C. 5:23-3.14(b)10i**, the proposed amendment would replace “Type A Unit,” “Type B Unit,” and “Accessible Unit” with “Adaptable or Accessible Unit” in the IBC/2006 for consistency with the terminology of the Barrier Free Subcode of the UCC (N.J.A.C. 5:23-7).

36. At **N.J.A.C. 5:23-3.14(b)10ii**, the proposed amendment to Section 1002 of the IBC/2006, entitled “Definitions,” would delete a cross-reference to Chapter 1 in the definition of “Merchandise Pad” because Chapter 1 is deleted in its entirety.

37. At **N.J.A.C. 5:23-3.14(b)10iii**, the proposed amendment to Section 1003.2 of the IBC/2006, entitled “Ceiling height,” would retain the current building subcode’s seven foot ceiling height for means of egress.

38. The proposal would delete the amendments to Section 1003.2.12.1, entitled “Height,” and Section 1003.2.12.2 of the building subcode, entitled “Opening limitations.” In the IBC/2006, the requirements for guard height and for opening limitations for guards have

been moved to Section 1013.2, entitled “Height,” and Section 1013.3, entitled “Opening limitations.” Therefore, the Department is proposing to reformat the amendments to place them under the correct sections in the IBC/2006.

39. At **N.J.A.C. 5:23-3.14(b)10v**, the proposed amendment to Section 1004.1.1 of the IBC/2006, entitled “Areas without fixed seating,” would delete the exception in its entirety. The exception allows a building official to reduce the occupant load of any space below the minimum load established by Table 1004.1. Changes to occupant loads must be addressed through the UCC’s variation process. Therefore, the Department is proposing to delete the exception contained in Section 1004.1.1 of the IBC/2006.

40. At **N.J.A.C. 5:23-3.14(b)10vi**, the proposed amendment to Section 1004.2 of the IBC/2006, entitled “Increased occupant load,” would retain the five-foot occupant load factor from the current building subcode. The IBC/2006 requires an occupant load of seven square feet per person, which decreases the occupant load for the calculation of egress capacity. Because the occupant load factor of seven square feet in the IBC/2006 will result in a reduction in the number of exits, the Department is proposing to retain the occupant load factor from the current building subcode to maintain the current level of life safety and to provide for consistency between the building subcode and the UFC.

41. At **N.J.A.C. 5:23-3.14(b)10viii**, the proposal would reformat the amendment to Section 1008.1.3.5 of the IBC/2006, entitled “Security grilles.” In the current building subcode, the requirements for security grilles are contained in Section 1003.3.1.3.5. In the IBC/2006, the requirements for security grilles are contained in Section 1008.1.3.5. Therefore, the Department is proposing that the amendments to Section 1008.1.3.5 of the IBC/2006 be reformatted to place the amendments in the correct order.

42. At **N.J.A.C. 5:23-3.14(b)10ix and (b)10x**, the proposed amendments to Section 1008.1.4, entitled “Floor elevation,” and Section 1008.1.6 of the IBC/2006, entitled “Thresholds,” would provide that landings and thresholds at doorways be 8.25 inches as opposed to 7.75 inches for consistency with the amendments to the residential stair requirements (Section 1009.3, Stair tread and risers).

43. At **N.J.A.C. 5:23-3.14(b)10xii**, the proposed amendment to Section 1008.1.8.3 of the IBC/2006, entitled “Locks and latches,” would delete places of religious worship from the exception, which allows churches of any size to have keyed locking mechanisms. Allowing churches with large occupant loads to have keyed locking mechanisms would decrease the level of protection for building occupants. Therefore, the Department is proposing to delete churches from the exception in Section 1008.1.8.3 of the IBC/2006.

44. At **N.J.A.C. 5:23-3.14(b)10xiv**, the proposed amendment to Exception 4 in Section 1009.3 of the IBC/2006, entitled “Stair tread and risers,” would provide a minimum winder tread depth of 9 inches for consistency with the amendment providing that the minimum tread depth of other stairs is 9 inches. In addition, the proposed amendment would delete Exception 5 of Section 1009.3 in its entirety because requirements for the replacement of existing stairways are covered by the rehabilitation subcode of the UCC at N.J.A.C. 5:23-6.

45. The proposal would delete the amendment to Section 1003.3.3.7 of the current building subcode because the concept of circular stairs is now contained with the requirements for winders. In addition, the proposal would delete the amendment to Section 1003.3.3.8 of the current building subcode because the winder exceptions for residential stairs are contained in the proposed amendments to Section 1009.3. (See Item

44). Therefore, the amendments to Section 1003.3.3.7 and Section 1003.3.3.8 of the current building subcode are no longer necessary.

46. At **N.J.A.C. 5:23-3.14(b)10xv**, the proposed amendment to Section 1009.10 of the IBC/2006, entitled “Handrails,” would delete Exception 5, which is necessary as a result of formatting changes to the IBC/2006.

47. The proposal would delete the amendment to Section 1004.2.2.1 of the current building subcode, entitled “Two exit access doorways,” because the section has been omitted in the IBC/2006.

48. At **N.J.A.C. 5:23-3.14(b)10xviii and (b)10xix**, the proposal would reformat the amendments to Section 1013.2, entitled “Height,” and Section 1013.3 of the IBC/2006, entitled “Opening limitations.” (See Item 38)

49. The proposal would delete the amendments to Section 1004.3.2, entitled “Corridors and passageways,” Section 1004.3.2.2, entitled “Corridor and passageway width,” and Section 1004.3.2.3 of the building subcode, entitled “Dead ends.” In the current building subcode, a distinction is made between corridors and passageways for consistency of interpretation. Because the IBC/2006 draws a distinction between corridors and passageways, the amendments are no longer necessary.

50. At **N.J.A.C. 5:23-3.14(b)10xxi**, the proposed amendment to Table 1017.1 of the IBC/2006, entitled “Corridor Fire Resistance Rating,” would replace “Not Permitted” with “1” to require that Group I-4 occupancies without sprinkler protection have fire resistance rated corridors. Exception 2 of Section 903.2.5 provides that for other than buildings of construction Types IIIB or VB, automatic fire sprinkler systems are not

required for Group I-4 child care facilities that are located at the level of exit discharge and that accommodate 100 or fewer children and in which each child care room has an exit door directly to the exterior. The proposed amendment would require that Group I-4 child care facilities that are not required to have sprinklers have fire resistance rated corridors to ensure the protection of building occupants.

51. At **N.J.A.C. 5:23-3.14(b)10xxiii**, the proposed amendment to Section 1020.1 of the IBC/2006, entitled “Vertical exit enclosures,” would add Exception 9 to the list of exceptions proposed for deletion. In the current building subcode, Exception 8 of Section 1020.1 is deleted thus prohibiting unenclosed exit stairs. Exception 9 of Section 1020.1 is proposed for deletion to provide for consistency with the deletion of Exception 8.

52. At **N.J.A.C. 5:23-3.14(b)10xxv**, the proposed amendment would delete Section 1025.1.1 of the IBC/2006, entitled “Bleachers.” Section 1025.1.1 references the International Code Council (ICC) 300 standard for bleachers. Because the IBC/2006 contains sufficient requirements for bleachers, the reference to the ICC 300 standard is not necessary. Therefore, the Department is proposing to delete Section 1025.1.1 of the IBC/2006 in its entirety.

53. At **N.J.A.C. 5:23-3.14(b)10xxvi**, the proposed amendment to Section 1026.1 of the IBC/2006, entitled “General,” would delete Exception 4 and Exception 7 to eliminate requirements for basements. The current building subcode does not require egress windows in basements that do not contain sleeping rooms. Therefore, the Department is proposing to retain the deletion of the requirements for egress windows in basements and to make companion changes to Exception 4 and 7 to delete the references to basements.

54. At **N.J.A.C. 5:23-3.14(b)12i**, the proposed amendment would delete Section 1204 of

the IBC/2006, entitled “Temperature control,” because requirements for heat are outside the scope of the UCC.

55. At **N.J.A.C. 5:23-3.14(b)15ii**, the proposed amendment to Section 1507.2.8.2 of the IBC/2006, entitled “Ice dam membrane,” would provide that ice and water shields be required in areas where the average daily temperature in January is 25 degrees F or less. The current building subcode requires ice and water shields based on temperature. The IBC/2006 requires ice dam membranes in areas where there has been a history of ice forming along the eaves causing a back up of water. Requiring ice dam membranes based on the history of ice formation is not reasonable. Therefore, the Department is proposing to retain the current building subcode requirement for ice and water shields in areas where the average daily temperature in January is 25 degrees F or less.

56. At **N.J.A.C. 5:23-3.14(b)16viii**, the proposed amendment to Section 1612.1 of the IBC/2006, entitled “General,” would delete “including substantial improvement and restoration of substantial damage to buildings and structures.” Section 1612.1 requires new construction and substantial improvements and restorations to buildings in flood hazard areas to be designed and constructed to resist the effects of flood hazards and flood loads. For new construction, local Flood Plain Managers are required to give prior approval as a condition of the issuance of construction permits and for existing buildings, local Flood Plain Managers have the responsibility of determining substantial improvements.

57. The proposal deletes the amendments to Section 1614.2, entitled “Change of occupancy,” and Section 1614.3 of the building subcode, entitled “Alterations” because the sections have been omitted in the IBC/2006. In addition, the proposal deletes the

amendment to add new Section 1607.14, entitled “Residential attics with trusses.” The IBC/2006, at Note i of Table 1607.1, entitled “Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads,” contains requirements for residential attics with trusses. Therefore, the amendment to add the section is no longer necessary.

58. The proposal would delete the amendment to Section 1621.1.7 of the building subcode, entitled “Component anchorage #1,” because the section has been omitted in the IBC/2006. Therefore, the amendment is no longer necessary.

59. The proposal would delete the amendment to Section 1621.3.14 of the building subcode, entitled “Elevator design requirements,” specifying that the scope of the American Society of Mechanical Engineers (ASME) A17.1 standard, entitled “Elevator Safety Requirements for Seismic Risk Zone 2 or Greater,” at Part XXIV is deleted. The American Society of Civil Engineers (ASCE) 7 standard contains design requirements for elevators in seismic risk areas. The most recent version of the ASME A17.1 standard also contains design requirements for elevators in seismic risk areas. The requirements for elevators in ASCE 7 and ASME A17.1 are consistent. Therefore, the amendment is no longer necessary.

60. The proposal would delete the amendment to Table 1622.2.5(2) of the building subcode, entitled “Importance Factor (I) and Seismic Use Group Classification for Nonbuilding Structures,” because the table has been omitted in the IBC/2006. Therefore, the amendment is no longer necessary.

61. At **N.J.A.C. 5:23-3.14(b)17xii**, the proposed amendment would delete Table 1704.9 of the IBC/2006, entitled “Required Verification and Inspection of Pier Foundations.” In the current building subcode, Section 1704.9, entitled “Pier foundations,” is deleted

because there is little need for special inspections for pier foundations. New Jersey's code officials are charged with the responsibility of ensuring that construction conforms to the code. Therefore, the Department is proposing to delete Table 1704.9 of the IBC/2006 for consistency.

62. At **N.J.A.C. 5:23-3.14(b)17xv**, the proposed amendment to Section 1706.1 of the IBC/2006, entitled "Contractor responsibility," would make a companion change to delete the references pertaining to special inspections for wind force resisting systems and wind resisting components. The current building subcode does not require special inspections for wind load designs because New Jersey code officials are well equipped to perform inspections for wind load designs. Therefore, the Department is proposing to delete the references to special inspections for wind load designs in Section 1706.1 of the IBC/2006.

63. At **N.J.A.C. 5:23-3.14(b)18ii**, the proposal would revise the amendment to new Section 1802.2.8 of the building subcode, entitled "Building height," by adding the text "above the grade plain" to clarify that soil tests are required for buildings that are more than three stories or 40 feet in height above the grade plain to ensure that the soil has the appropriate load bearing capacity.

64. The proposal would delete the amendment to Section 1805.2.1, entitled "Frost protection," and would retain the current IBC text. The IBC limitation on frost protection for footings is: An Occupancy category I (agricultural buildings, temporary storage facilities, minor storage facilities), an area of 600 sf or less of light frame construction or 400 sf or less of other than light frame construction AND an eave height of 10 feet or less. The building must meet all of the conditions to be exempt from frost protection.

65. The proposal would delete the amendment to Section 1806.3.1 of the building subcode, entitled “Floors,” requiring that floors be waterproofed by using either a membrane of rubberized asphalt, butyl rubber, or of not less than 6 mil polyvinyl chloride. Because the IBC/2006 requires floors to be waterproofed by using either a membrane of rubberized asphalt, butyl rubber, or of not less than 6 mil polyvinyl chloride, the amendment is no longer necessary.

66. At **N.J.A.C. 5:23-3.14(b)18vi**, the proposed amendment to Item 1 of Section 1808.2.1 of the IBC/2006, entitled “Design,” would delete the reference to Group U. (See Item 16)

67. At **N.J.A.C. 5:23-3.14(b)18viii**, the proposed amendment to Section 1808.2.8.3.1 of the IBC/2006, entitled “Load test evaluation,” would delete Item 4 in its entirety. Item 4 in Section 1808.2.8.3.1 provides that other methods for evaluating pile load tests may be utilized provided the methods are approved by the building official. Other methods for evaluating pile load tests must be approved through the UCC’s variation process. Therefore, the Department is proposing to delete Item 4 in Section 1808.2.8.3.1 of the IBC/2006.

68. At **N.J.A.C. 5:23-3.14(b)18ix**, the proposed amendment to the exception in Section 1808.2.23.1 of the IBC/2006, entitled “Seismic Design Category C,” would delete the qualifying language that building officials must approve interconnections for pier supporting foundation walls, isolated interior posts, lightly loaded exterior decks, and patios of Group R-3 and Group U. The UCC provides enforcement responsibilities for code officials.

69. At **N.J.A.C. 5:23-3.14(b)18x**, the proposed amendment to Exception 1 of Section

1808.2.23.2 of the IBC/2006, entitled “Seismic Design Category D, E, or F,” would delete the reference to Group U. (See Item 16)

70. The proposal would delete the amendment to Figure 2111.1 of the building subcode, entitled “Fireplace and Chimney Details,” because Figure 2111.1 has been omitted from the IBC/2006.

71. At **N.J.A.C. 5:23-3.14(b)19**, the proposal deletes the amendment to Section 2303.4.1, entitled “Truss design drawings,” which clarifies that the requirements of the section pertain to truss layout drawings and truss shop drawings. Because Section 2303.4.1.3 of the IBC/2006, entitled “Design,” contains requirements for truss drawings, which include truss layout drawings and truss shop drawings, the amendment is no longer necessary.

72. At **N.J.A.C. 5:23-3.14(b)19i, (b)19ii, (b)19iv, and (b)19v**, the proposed amendments to Sections 2303.4.1.2, entitled “Truss design drawings,” Section 2303.4.1.3, entitled “Truss placement diagram,” Section 2306.3.2, entitled “Allowable shear for wood structural panel block diaphragms utilizing multiple rows of fasteners with framing of Douglas fir-larch or southern pine for wind or seismic loading,” and Section 2308.1 of the IBC/2006, entitled “General,” would delete the requirements pertaining to the signing and sealing of truss design drawings. The Building Design Services Act governs the signing and sealing of design drawings. Therefore, the Department is proposing to delete the requirements in the IBC/2006 that pertain to the signing and sealing of truss design drawings.

73. At **N.J.A.C. 5:23-3.14(b)21i**, the proposed amendments to Section 3001.1 of the IBC/2006, entitled “Scope,” would insert grammatical corrections.

74. At **N.J.A.C. 5:23-3.14(b)21ii**, the proposal would delete the amendment specifying that the scope of the American Society of Mechanical Engineers (ASME) A17.1 standard, entitled “Elevator Safety Requirements for Seismic Risk Zone 2 or Greater,” at Part XXIV is deleted. (See Item 59) In addition, the proposed amendment would delete sections that address material lifts, which are outside the scope of the UCC.

75. At **N.J.A.C. 5:23-3.14(b)21viii**, the proposal would retain the exception in Section 3004.4 of the IBC/2006, entitled “Plumbing and mechanical systems,” which provides requirements for the installation of drains, sumps, and sump pumps in elevator pits. Currently, the building subcode prohibits the installation of drains, sumps, or sump pumps in elevator pits. There are instances where the water table in elevator shafts is such that drains, sumps, or sump pumps are warranted. Therefore, the Department is proposing to delete the amendment to Section 3004.4 to allow the installation of drains, sumps, or sump pumps in elevator pits provided the installations are not connected to the sanitary drainage system.

76. At **N.J.A.C. 5:23-3.14(b)22iii**, the proposed amendment to Section 3104.2 of the IBC/2006, entitled “Separate structures,” would delete Exception 2 in its entirety. Exception 2 applies to Type B dwelling units, which are prohibited in New Jersey. In addition, the current building subcode contains requirements for swimming pool barriers from the International Residential Code/2000. Because the requirements for swimming pool barriers in the IBC/2000 were different than the requirements for swimming pool barriers in the International Residential Code/2000, the provisions for swimming pool barriers in the building subcode were modified to provide for consistency. Because the requirements for swimming pool barriers in the IBC/2006 are the same as the

requirements for swimming pool barriers contained in the International Residential Code/2006, the amendments to retain the International Residential Code/2000 requirements for swimming pool barriers in the building subcode are no longer necessary.

77. At **N.J.A.C. 5:23-3.14(b)22iv**, the proposed amendment would delete Item 3 of Section 3109.4.1.8 of the IBC/2006, entitled “Dwelling wall as a barrier,” to eliminate the requirement for other means of protection for swimming pools, such as self-closing doors with self-latching devices. This requirement is excessive because the dwelling is considered part of the pool enclosure. It is not necessary to require that doors leading to swimming pools be self-closing and self-latching. Therefore, the Department is proposing to delete the requirement in the IBC/2006 for other means of protection for swimming pools.

78. At **N.J.A.C. 5:23-3.14(b)22v**, the proposed amendments to Section 3109.4.1.9 of the IBC/2006, entitled “Pool structure as a barrier,” would delete the requirement that ladders or steps be capable of being secured, locked, or removed. Ladders for above-ground pools should be surrounded by barriers regardless of whether owners can secure the ladders in a manner that renders them inaccessible. Therefore, the Department is proposing to delete the requirement in the IBC/2006 for securing ladders or steps for above-ground swimming pools by means other than a barrier.

79. At **N.J.A.C. 5:23-3.14(b)22vi**, the proposed amendment would delete Section 3109.5 of the IBC/2006, entitled “Entrapment avoidance.” The requirements for entrapment avoidance are contained in the plumbing subcode. Therefore, the Department is proposing to delete Section 3109.5 of the IBC/2006 in its entirety.

80. At **N.J.A.C. 5:23-3.15(b)22vii**, the proposed amendment would add new Section

3110.0, entitled “Swimming Pools and Spas,” to reformat the current building subcode’s requirements for swimming pools and spas.

81. At **N.J.A.C. 5:23-3.14(b)26**, the proposal would delete the amendments that insert references to ASME A18.1-1999, entitled “Safety Standard for Platform Lifts and Stairway Chairlifts,” with A18.1a-2001 addenda under the subheading “ASME” and that insert references to NFPA 13-99, entitled “Installation of Sprinkler Systems,” NFPA 13D-99, entitled “Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes,” NFPA 13R-99, entitled “Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height,” and NFPA 20-99, entitled “Installation of Centrifugal Fire Pumps” under the subheading “NFPA.” The IBC/2006 adopts by reference the most recent editions of the ASME A18.1 standard and the NFPA 13 standards.

82. At **N.J.A.C. 5:23-3.14(b)26i**, the proposed amendments would insert a new subheading for the National Spa and Pool Institute (NSPI) and would update the editions of the NSPI design standards for pools and spas.

83. At **N.J.A.C. 5:23-3.14(b)26ii, (b)26iii, (b)26iv, (b)26v, (b)26vi, (b)26vii, (b)26viii, and (b)26ix**, under the subheadings for ACI 318-05, ACI 530-05, AISC 341-05, ASCE/SEI 5-05, ASTM A615/A A615M-04a, ASTM A898/A 898M-91 (2001), AWS D1.1-04, and TMS 402-05, the proposed amendments would delete references to certain sections of Chapter 17 of the IBC/2006, entitled “Structural Tests and Special Inspections,” that are deleted.

84. At **N.J.A.C. 5:23-3.14(b)27iii**, the proposed amendment would revise the title of Appendix J in the building subcode to “Grading” because the title of the appendix has

been changed in the IBC/2006. In addition, the proposed amendment would delete Appendix K of the IBC/2006, entitled “ICC Electrical Code,” because the provisions in the appendix are covered by the electrical subcode of the UCC at N.J.A.C. 5:23-3.16.

Plumbing Subcode (NSPC/2006)

85. At **N.J.A.C. 5:23-3.15**, language and section numbers have been revised and titles of code sections have been inserted for consistency with the format of the building subcode.

86. At **N.J.A.C. 5:23-3.15(a)1**, the amendment would make a correction to the title of the National Standard Plumbing Code and would propose the adoption of the NSPC/2006 as the plumbing subcode of the UCC. In addition, at **N.J.A.C. 5:23-3.15(a)2**, the proposed amendment would make a companion change to update the reference to the 2006 edition of the NSPC.

87. At **N.J.A.C. 5:23-3.15(b)3iii and (b)3iv**, the proposed amendment to Section 2.11, entitled “Piping materials exposed within plenums,” and Section 2.12 of the NSPC/2006, entitled “Sleeves,” would replace “Codes” and “regulations” with “subcodes” and “subcode” for consistency with the terminology used in the UCC.

88. At **N.J.A.C. 5:23-3.15(b)3v**, the proposed amendment to Section 2.16 of the NSPC/2006, entitled “Freezing or overheating,” would insert “6” on the line provided to specify the required size of the minimum earth cover for building sewers connected to private sewage disposal systems.

89. At **N.J.A.C. 5:23-3.15(b)4ix**, the proposed amendment would clarify that Section 3.12 of the NSPC/2006, entitled “Alternate materials and methods,” is deleted in its entirety. In the current plumbing subcode, the subsections of Section 3.12 are deleted separately. The proposed amendment to Section 3.12 of the NSPC/2006 would eliminate

confusion by specifying that the section is deleted in its entirety. Alternate materials and methods are covered by the UCC at N.J.A.C. 5:23-3.7, Municipal approvals of alternate materials, equipment, or methods of construction.

90. At **N.J.A.C. 5:23-3.15(b)6i and (b)6ii**, the proposed amendment to Section 5.3.2, entitled “Trap seals,” and Section 5.3.4 of the NSPC/2006, entitled “Building traps,” would insert a cross-reference to N.J.A.C. 5:23-3.3, Enforcement.

91. At **N.J.A.C. 5:23-3.15(b)7i**, the proposal would eliminate the amendment to delete “in the opinion of the administrative authority and” in Section 6.1.1, entitled “Where required.” The language has been omitted in Section 6.1.1 of the NSPC/2006.

92. At **N.J.A.C. 5:23-3.15(b)8ii**, the proposed amendment to Section 7.4.4 of the NSPC/2006, entitled “Bowl height,” would delete Exception 3, which provides requirements for the height of water closet bowls for adults. In addition, the proposed amendment would delete the language requiring that water closets in facilities intended primarily for use by the elderly, other than those required to be accessible, be at least 17 inches high. The requirements for accessible water closets are covered by the Barrier Free Subcode at N.J.A.C. 5:23-7.

93. At **N.J.A.C. 5:23-3.15(b)8vi**, the proposed amendment would delete the requirements for entrapment avoidance contained in Section 7.23 of the NSPC/2006, entitled “Safety Features for Spas and Hot Tubs.” Currently, the building, plumbing, and one- and two-family dwelling subcodes of the UCC each contain requirements that are intended to prevent entrapment in swimming pools, spas, and hot tubs. In order to maintain the current level of life safety and also to establish clear enforcement responsibility, the requirements for entrapment avoidance from Section 7.23 of the NSPC/2006, the current

plumbing subcode, the IBC/2006, and International Residential Code/2006 are being consolidated into new Section 7.23 of the NSPC/2006, entitled “Safety features for swimming pools, spas and hot tubs.”

94. At **N.J.A.C. 5:23-3.15(b)9i**, the proposed amendment to Section 8.9 of the NSPC/2006, entitled “Seismic supports for piping,” would replace “code” with “subcode” for consistency with the terminology used in the UCC.

95. At **N.J.A.C. 5:23-3.15(b)10iv**, the proposed amendment to Note b in Section 10.4.4 of the NSPC/2006, entitled “Private supplies,” would insert a cross-reference to N.J.A.C. 7:10-10.2(e) of the Safe Water Drinking Act, which is administered by the Department of Environmental Protection, for requirements for cross connections between private and public water supplies.

96. At **N.J.A.C. 5:23-3.15(b)10vii**, the proposed amendment to Section 10.15.1 of the NSPC/2006, entitled “Hot water supply system,” would insert a grammatical correction.

97. At **N.J.A.C. 5:23-3.15(b)12**, the proposal eliminates an amendment to language contained in Section 12.4.5, entitled “Sidewall venting,” because the language has been omitted in the NSPC/2006.

98. At **N.J.A.C. 5:23-3.15(b)13i**, the proposed amendment would insert a grammatical correction in the UCC.

99. At **N.J.A.C. 5:23-3.15(b)13ii**, the proposed amendment would eliminate the cross-reference to Appendix A of the 1993 National Standard Plumbing Code in Section 13.1.10.1 of the NSPC/2006, entitled “Primary roof drainage.” Because the requirements for rainfall rate are contained at N.J.A.C. 5:23-3.15(b)13ii, the reference to the 1993 edition of the NSPC is not necessary.

100. At **N.J.A.C. 5:23-3.15(b)15**, the proposed amendment would reformat the amendments to Chapter 16 of the NSPC/2006, entitled “Regulations Governing Individual Sewage Disposal Systems for Homes and Other Establishments Where Public Sewer Systems Are Not Available,” to place the amendments in the correct sequential order. Currently, the amendments to Chapter 16 are listed before the amendments to Chapter 15 of the NSPC/2006. The proposal corrects the order of the amendments. At

101. **N.J.A.C. 5:23-3.15(b)15ii**, “abandoned septic system” has been replaced with “abandoned tank” to clarify that plumbing subcode officials are required to ensure that abandoned tanks are disconnected from buildings.

102. At **N.J.A.C. 5:23-3.15(b)16**, the proposed amendment would delete “and comprising sections 17.1 through 17.15.2.” Because Chapter 17 of the NSPC/2006, entitled “Potable Water Supply Systems,” is deleted in its entirety, it is not necessary to list the sections that comprise the chapter.

103. At **N.J.A.C. 5:23-3.15(b)17i**, the proposed amendment to Section 18.2.1 of the NSPC/2006, entitled “General,” would insert a grammatical correction.

104. At **N.J.A.C. 5:23-3.15(b)19**, the proposed amendment would delete the references to the following sections in Section F.2 of Appendix F, entitled “References”: “1.7.2 Penalties; 1.9.8 Permit Expiration; 1.10.2 Plan Review Fees; 1.10.3 Plan Review Expiration; 1.10.5 Refunding of Fees; and 1.11.5 Requests for Inspection.” The UCC contains all the administrative requirements for the enforcement of the technical subcodes.

Fire Protection Subcode

105. At **N.J.A.C. 5:23-3.17**, editions of model codes have been updated, which is necessary as a result of the proposed adoption of the most recent versions of the International Building Code, International Mechanical Code, and International Fuel Gas Code as the building, mechanical, and fuel gas subcodes of the UCC. In addition, the reference to the National Electrical Code has been updated to the 2005 edition, which is the current adopted electrical subcode of the UCC.

106. The proposal would delete the amendments to Section 907.2.6, entitled “Group I,” and Section 907.2.8 of the building subcode, entitled “Group R-1,” because the requirements are being incorporated in the proposed adoption of the IBC/2006. (See Item 29)

Energy Subcode (IECC/2006)

107. At **N.J.A.C. 5:23-3.18(a)1**, the amendment would propose the adoption of the IECC/2006 as the energy subcode of the UCC. At **N.J.A.C. 5:23-3.18(a)1i**, the proposed amendment would make a companion change to update a reference to the 2006 edition of the IECC and to provide the name of the organization that publishes the model code.

108. At **N.J.A.C. 5:23-3.18(b)**, the proposed amendment would delete the modifications made to CABO MEC/1995 and would propose the following modifications to the IECC/2006:

109. At **N.J.A.C. 5:23-3.18(b)1i**, the proposed amendment would delete Section 101.1 of the IECC/2006, entitled “Title,” because the IECC/2006 is being proposed as the energy subcode of the UCC.

110. At **N.J.A.C. 5:23-3.18(b)1ii**, the proposed amendment would delete Section

101.4.1, entitled “Existing buildings;” Section 101.4.2, entitled “Historic buildings;” Section 101.4.3, entitled “Additions, alterations, renovations or repairs;” and Section 101.4.4 of the IECC/2006, entitled “Change in Occupancy.” The rehabilitation subcode of the UCC covers work in existing buildings, including historic structures, at N.J.A.C. 5:23-6.

111. At **N.J.A.C. 5:23-3.18(b)iii**, the proposal would insert new Section 101.5.3, entitled “Residential high-efficiency mechanical tradeoff.” The proposed amendment would retain the provision that gives builders the option of installing high efficiency equipment in lieu of installing basement wall insulation.

112. At **N.J.A.C. 5:23-3.18(b)iv**, the proposed amendment would delete Section 102.3 of the IECC/2006, entitled “Maintenance information,” because maintenance work for equipment or systems is outside the scope of the UCC.

113. At **N.J.A.C. 5:23-3.18(b)v**, the proposed amendment would delete Section 104, entitled “Construction documents,” Section 105, entitled “Inspections,” and Section 106 of the IECC/2006, entitled “Validity.” The UCC contains all of the administrative requirements for the enforcement of the technical subcodes.

114. At **N.J.A.C. 5:23-3.18(b)2i**, the proposed amendment to Chapter 2 of the IECC/2006, entitled “Definitions,” would delete the definitions of “addition,” “building,” “code official,” and “dwelling unit” because the terms are defined in the building subcode of the UCC. In addition, at **N.J.A.C. 5:23-3.18(b)2ii**, the proposed amendment would insert a definition for “residential building” to mirror the application of the building subcode.

115. At **N.J.A.C. 5:23-3.18(b)3**, the proposed amendments to Chapter 3 of the

IECC/2006, entitled “Climate Zones,” would delete all sections, figures, and tables in the chapter and would insert a new table that provides four climate zones for New Jersey counties based on true heating degree-days drawn from NOAA data. The change from two climate zones (Zone 4A and Zone 5) to four climate zones allows for a more specific application of energy conservation requirements.

116. At **N.J.A.C. 5:23-3.18(b)4i**, the proposed amendment would delete Section 401.3 of the IECC/2006, entitled “Certificate,” because the UCC contains requirements for the issuance of certificates.

117. At **N.J.A.C. 5:23-3.18(b)4ii, (b)4iii, (b)4iv, (b)4v, (b)4vi, and (b)4vii**, the proposed amendments to Section 402.1.1, entitled “Insulation and fenestration criteria;” Table 402.1.1, entitled “Insulation and fenestration requirement by component;” Section 402.1.2, entitled “R-value computation;” Section 402.1.3, entitled “U-factor alternative;” Table 402.1.3, entitled “Equivalent U-Factors;” and Section 402.1.4 of the IECC/2006, entitled “Total UA alternative;” would eliminate the concern created by the exclusion of window to wall ratios (percentage of glazing values) in the IECC/2006 by assigning values for the ratios. In doing so, Table 402.1.1, Section 402.1.2, and Section 402.1.3 would be deleted, new Table 402.1.3, entitled “Assembly thermal transmittance value (U-factor) would replace “old” Table 402.1.3, and references to Section 402.1.4 would be inserted.

118. At **N.J.A.C. 5:23-3.18(b)4viii**, the proposed amendment would delete the exception to Section 402.2.3 of the IECC/2006, entitled “Mass walls,” because the exception contains R-values for zones that are outside New Jersey.

119. At **N.J.A.C. 5:23-3.18(b)4ix**, the proposed amendments would replace references to

Table 402.1.1 with references to Table 402.1.3 because Table 402.1.1 has been deleted.

120. At **N.J.A.C. 5:23-3.18(b)4x**, the proposed amendment to Section 402.2.10 of the IECC/2006, entitled “Thermally isolated sunroom insulation,” would insert the appropriate climate zones in heating degree days from new Table 301.1.

121. At **N.J.A.C. 5:23-3.18(b)4xi**, the proposed amendment to Section 402.3.5 of the IECC/2006, entitled “Thermally isolated sunroom U-factor,” would delete the references to Climate Zones 4 through 8 because the requirements apply to the entire State.

122. At **N.J.A.C. 5:23-3.18(b)4xii**, the proposed amendment would delete Section 402.3.6 of the IECC/2006, entitled “Replacement fenestration,” in its entirety. The rehabilitation subcode of the UCC (N.J.A.C. 5:23-6) covers requirements for the replacement of building components, such as windows, skylights, and doors.

123. At **N.J.A.C. 5:23-3.18(b)4xiii**, the proposed amendment to Item 3 of Section 402.4.3 of the IECC/2006, entitled “Recessed lighting,” would clarify that recessed lighting fixtures that are installed in airtight boxes must be labeled for the installation.

124. At **N.J.A.C. 5:23-3.18(b)4xiv**, the proposed amendment to Exception 2 of Section 402.5 of the IECC/2006, entitled “Moisture control (Mandatory),” would insert the appropriate climate zone in heating degree days from new Table 301.1.

125. At **N.J.A.C. 5:23-3.18(b)4xv**, the proposed amendment would delete Section 402.6 of the IECC/2006, entitled “Maximum fenestration U-factor and SHGC (Mandatory),” in its entirety because fenestration maximums are amended to be based on the window to wall ratios and solar heat gain coefficients do not apply to New Jersey.

126. At **N.J.A.C. 5:23-3.18(b)5**, the proposed amendments would delete all sections and tables in Chapter 5 of the IECC/2006, entitled “Commercial Energy Efficiency,” and

would provide that commercial buildings shall comply with the requirements of ASHRAE 90.1/2004. The proposal would amend Section 9.4.1.4(c) of ASHRAE 90.1/2004 to allow the option of installing a master control device at the entry to each room in a guest suite. In addition, the proposal would provide that the requirements of Chapter 8 of ASHRAE 90.1/2004, entitled “Power,” are optional because the requirements pertain to design requirements for power distribution systems. Finally, the proposal would amend Table B-1 of the 2004 edition of ASHRAE 90.1, entitled “Climate Zones,” to provide that New Jersey is Zone 4A, except that Bergen, Hunterdon, Morris, Passaic, Somerset, Sussex, and Warren Counties shall be considered Zone 5A to better reflect actual climate data.

Mechanical Subcode (IMC/2006)

127. At **N.J.A.C. 5:23-3.20**, language has been revised and titles of code sections have been inserted for consistency with the format of the building subcode.

128. At **N.J.A.C. 5:23-3.20(a)1**, the amendments would propose the adoption of the IMC/2006 as the mechanical subcode of the UCC. At **N.J.A.C. 5:23-3.20(a)1ii and (b)**, the proposed amendments would make companion changes to update the references to the 2006 edition of the IMC.

129. At **N.J.A.C. 5:23-3.20(b)3**, the proposal would delete the amendment to Section 305.5, entitled “Protection against physical damage.” In the current mechanical subcode, in Section 305.5, “1.5” is replaced with “1.0” to create consistency between the mechanical subcode and the fuel gas subcode of the UCC. This amendment is no longer necessary because the IMC/2006 and the IFGC/2006 are consistent. The IMC/2006 and

the IFGC/2006 require shield plates for piping installed through holes or notches in studs, joists, rafters or similar members less than 1.5 inches from the nearest edge of the member. In addition, the proposed amendments would clarify that “drywell, sump pump, floor drain, or drainage system below floor” is inserted after “approved plumbing fixture.” Currently, the UCC allows condensate to be drained to a drywell, sump pump, floor drain, or drainage system only. The proposed amendment would make it clear that condensate may be drained to an approved plumbing fixture.

130. The proposal would delete the amendment that added an exception to Section 403.2, entitled “Outdoor air required,” to allow a reduction in the minimum required rate of outdoor air. Because Section 403.2 of the IMC/2006 contains the exception, the amendment is no longer necessary.

131. At **N.J.A.C. 5:23-3.20(b)4**, the proposed amendment to Section 513.11 of the IMC/2006, entitled “Power systems,” would replace cross-references to the International Code Council (ICC) Electrical Code with cross-references to the adopted electrical subcode of the UCC, the 2005 edition of the National Electrical Code.

132. At **N.J.A.C. 5:23-3.20(b)6i**, the proposed amendment to Section 801.18.2 of the IMC/2006, entitled Flue passageways, would replace “free of obstructions and combustible deposits” with “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d).” The UCC’s chimney certification program provides for a chimney that is free of obstructions and combustible deposits.

133. The proposal would delete the amendments to Chapter 9, entitled “Appliances, Fireplaces and Solid Fuel Burning Equipment.” In the current mechanical subcode, Section 917.2, entitled “Prohibited location,” and Section 917.3, entitled “Domestic

appliances,” are deleted to allow the installation of commercial cooking appliances in dwellings units. Because there are commercial cooking appliances on the market with built in safety features for residential use, the amendments to delete Section 917.2 and Section 917.3 in the IMC/2006 are not necessary.

134. At **N.J.A.C. 5:23-3.20(b)7ii**, the proposed amendment to Section 1003.1 of the IMC/2006, entitled “General,” would update the edition of the American Society of Mechanical Engineers’ standard entitled, “Rules for Construction of Pressure Vessels, Section VIII.”

135. At **N.J.A.C. 5:23-3.20(b)10i(1), (2), (3), and (4)**, the proposed amendments to Chapter 15 of the IMC/2006, entitled “Referenced Standards,” would update the editions of the ICC Electrical Code, the International Existing Buildings Code, the International Energy Conservation Code, and the International Plumbing Code, which are proposed for deletion. In addition, the proposal would delete the amendments to the editions of the International Building Code (IBC), International Fire Code (IFC), and International Residential Code (IRC). The current editions of the IBC, IFC, and IRC (2006) are included in Chapter 15 of the IMC/2006.

One- and Two-Family Dwelling Subcode (IRC/2006)

136. At **N.J.A.C. 5:23-3.21**, section numbers and titles of sections have been updated, which is necessary as a result of the proposed adoption of the IRC/2006.

137. At **N.J.A.C. 5:23-3.21(a)1**, the amendment would propose the adoption of the IRC/2006 as the one- and two-family dwelling subcode of the UCC. At **N.J.A.C. 5:23-**

3.21(a)1ii and (c), the proposed amendments would make companion changes to update the references to the 2006 edition of the IRC.

138. At **N.J.A.C. 5:23-3.21(c)2xvii**, the proposed amendment to Chapter 2 of the IRC/2006, entitled “Definitions,” would delete the definition of “structure” because the term is defined in the UCC at N.J.A.C. 5:23-1.4, Definitions.

139. At **N.J.A.C. 5:23-3.21(c)3**, the proposal would delete the amendments to Section R301.2.1.1 of the one- and two-family dwelling subcode, entitled “Design criteria.” In the adoption of the current one- and two-family dwelling subcode, modifications were made to the IRC/2000’s wind requirements to provide design professionals with a complete set of prescriptive requirements for all wind areas in New Jersey to eliminate the need for more than one standard. The wind load requirements of the IRC/2006 have changed significantly, so that it is no longer appropriate to combine the prescriptive requirements from the referenced standards into an amendment to the UCC. The Department is proposing to adopt the IRC/2006’s requirements for wind. This requirement that one- and two-family dwellings be designed and constructed in accordance with the appropriate prescriptive wind requirements is contained in the IRC/2006.

The wind loading requirements of the IRC/2006 are based on design criteria from the 2005 edition of the American Society of Civil Engineers (ASCE) 7 standard. Earlier versions of the ASCE 7 standard utilized a wind load factor of 1.3 based on a statistical analysis of wind forces for buildings not exposed to hurricane force winds. Two recent scientific studies have shown that the wind load factor in hurricane-prone areas must be increased to approximately 1.5 to 1.8 to maintain comparable reliability. ASCE 7-2005

contains a wind load factor of 1.6, which results in a 23 percent increase in wind load. In addition, in ASCE 7-2005, the dead load capacity to counteract uplift forces has been reduced to 60 percent of the dead load. The scientific research on wind speed and load factors indicates that the IRC/2006's upgrades in wind requirements are warranted.

The Department will continue to research wind speed and wind load factors to determine whether the requirements of the current one- and two-family dwelling subcode should be retained. Changes to retain the current requirements of the one- and two-family dwelling subcode for wind will be made if such changes are supported by scientific data. Comments from the public are sought on this issue.

140. At **N.J.A.C. 5:23-3.21(c)3ii**, the proposed amendment to Section R301.2.1.2 of the IRC/2006, entitled "Protection of openings," would require that windows and glass doors in buildings located in wind-borne debris regions have glazed openings. Section R613.7 of the IRC/2006, entitled "Wind-borne debris protection," requires that exterior windows and glass doors located in wind-borne debris regions be protected in accordance with Section R301.2.1.2. The Department is proposing to add glass doors to Section R301.2.1.2 for consistency with Section R613.7 of the IRC/2006.

141. At **N.J.A.C. 5:23-3.21(c)3iii**, the proposed amendment to Table R301.2.1.2 of the one- and two-family dwelling subcode, entitled "Climatic and Geographic Design Criteria," would delete the portion of the table that addresses damage caused by decay because the design criteria has been omitted from Table R301.2.1.2 in the IRC/2006.

142. At **N.J.A.C. 5:23-3.21(c)3iv**, the proposed amendment to Section R301.2.2 of the IRC/2006, entitled "Seismic provisions," would insert language to clarify that detached one- and two-family dwellings and attached single-family townhouses are exempt from

the seismic requirements of the IRC/2006. In the current one- and two-family dwelling subcode, detached one- and two-family dwelling subcode and attached single-family townhouses are exempt. The Department is proposing to modify Section R301.2.2 of the IRC/2006 to state this exemption unequivocally.

143. At **N.J.A.C. 5:23-3.21(c)3v**, the proposed amendment would clarify that Section R303.6 of the IRC/2006, entitled “Stairway illumination,” and its corresponding subsection, Section R303.6.1, entitled “Light activation,” are deleted in their entirety to eliminate confusion.

144. The proposal would delete the amendment to add new Section R301.8, entitled “Residential attics with trusses,” to the one- and two-family dwelling subcode because the requirements are contained in Note b and Note g of Table R301.5 of the IRC/2006, entitled “Minimum Uniformly Distributed Live Loads.” Therefore, the amendment to add Section R301.8 is no longer necessary.

145. The proposal would delete the amendment to Section R308.4 of the one- and two-family dwelling subcode, entitled “Hazardous locations.” In the current one- and two-family dwelling subcode, Section R308.4 is amended to resolve conflicts between the requirements contained in Item 9 and the requirements contained in Exception 9 of the section. The conflicts in the requirements have been resolved in the IRC/2006. Therefore, the amendment to Section R308.4 is no longer necessary.

146. At **N.J.A.C. 5:23-3.21(c)3viii**, the proposed amendment to Section R310.1 of the IRC/2006, entitled “Emergency escape and rescue required,” would delete references to emergency egress and rescue openings in basements. In addition, the proposed amendment would delete the exception because it references basements. (See Item 53 for

a companion discussion.)

147. At **N.J.A.C. 5:23-3.21(c)3ix, 3x, 3xi, 3xii, 3xiii, and 3xiv**, the proposal would reformat the amendments to the requirements for residential stairs. In the current one- and two-family dwelling subcode, the residential stair requirements are contained in Section R314.2, entitled “Tread and risers;” Section R314.4, entitled “Windings;” Section R314.6, entitled “Circular stairways;” Section R314.7, entitled “Illumination;” Section R315.1, entitled “Handrails;” and Section R316.2, entitled “Guard opening limitations.” In the IRC/2006, the residential stair requirements are contained in different sections of the code. Therefore, the Department is proposing to reformat the amendments to place them under the correct sections of the IRC/2006.

148. At **N.J.A.C. 5:23-3.21(c)3xvii**, the proposed amendment would delete Section R311.6.1 of the IRC/2006, entitled “Maximum slope,” because dimensions for the slopes of ramps are covered by the Barrier Free Subcode at N.J.A.C. 5:23-7.

149. At **N.J.A.C. 5:23-3.21(c)3xviii**, the proposed amendment to Section R317.1 of the IRC/2006, entitled “Dwelling unit separation,” would clarify where the reference to 13R or 13D sprinkler systems should be inserted.

150. At **N.J.A.C. 5:23-3.21(c)3xix**, the proposed amendment to Section R317.2 of the IRC/2006, entitled “Townhouses,” would replace a reference to Chapters 33 through 42 of the IRC/2006 with a reference to the electrical subcode of the UCC. Chapters 33 through 42 contain electrical requirements, which are covered by the electrical subcode of the UCC at N.J.A.C. 5:23-3.16. Similar amendments to replace references to sections that have been deleted with references to the appropriate subcodes of the UCC have been made throughout the proposal to adopt the IRC/2006. (See N.J.A.C. 5:23-3.21(c)4vi;

(c)7iv; (c)12i, 12ii, and 12iv; (c)13ii, 13iii, 13iv, 13v, 13vi, and 13viii; (c)15i and 15ii; (c)16i and 16ii; (c)17i; (c)18iii, 18vi, 18xii, and 18xiii)

151. At **N.J.A.C. 5:23-3.21(c)3xx**, the proposed amendment to Section R318.1 of the IRC/2006, entitled “Moisture control,” would replace the reference to climate zones 1 through 4 with a reference to climate zones based on true heating degree days for consistency with the proposed amendments to the IECC/2006. (See Item 115)

152. At **N.J.A.C. 5:23-3.21(c)3xxii**, the proposed amendment would delete Section R322 of the IRC/2006, entitled “Accessibility,” because requirements for accessible design and construction are covered by the Barrier Free Subcode at N.J.A.C. 5:23-7.

153. At **N.J.A.C. 5:23-3.21(c)3xxiii**, the proposed amendment would delete Section R323 of the IRC/2006, entitled “Elevators and platform lifts,” because requirements for elevators are covered by the elevator subcode of the UCC at N.J.A.C. 5:23-12.

154. At **N.J.A.C. 5:23-3.21(c)3xxiv, (c)3xxv, and (c)3xxvi**, the proposed amendments to Section R324.1.5, entitled “Protection of mechanical and electrical systems,” Section R324.1.6, entitled “Protection of water supply and sanitary sewage systems,” and Section R324.1.8 of the IRC/2006, entitled “Manufactured housing,” would delete references to replacement equipment and systems and to replacement manufactured housing because requirements for existing equipment and systems and buildings are covered by the rehabilitation subcode at N.J.A.C. 5:23-6.

155. At **N.J.A.C. 5:23-3.21(c)3xxvii**, the proposed amendment would delete Section R324.3.6 of the IRC/2006, entitled “Construction documents,” because the Building Design Services Act regulates the preparation of construction documents.

156. At **N.J.A.C. 5:23-3.21(c)3xxviii**, the proposed amendment would insert new Section

R325 of the IRC/2006, entitled “Carbon Monoxide Alarms,” to incorporate requirements for the installation of carbon monoxide alarms in the immediate vicinity of each sleeping area provided the dwelling unit contains a fuel burning appliance or has an attached garage for consistency with the mechanical subcode of the UCC (N.J.A.C. 5:23-3.20).

157. At **N.J.A.C. 5:23-3.21(c)4**, the proposal would eliminate the amendment that deletes the reference to Table R405.1 of the one- and two-family dwelling subcode, entitled “Properties of Soils Classified According to the Unified Soil Classification System,” because the Department is proposing to adopt Table R405.1 of the IRC/2006.

158. At **N.J.A.C. 5:23-3.21(c)4ii**, the proposed amendment would delete the exception to Section R403.1.4.1 of the IRC/2006, entitled “Frost protection,” and would incorporate requirements from Section 1805.2.1 of the IBC/2006 to provide that free standing buildings are not required to have frost protection provided the buildings present a low hazard to human life in the event of failure, have an area of 600 square feet or less for light framed construction or 400 square feet or less for other than light framed construction, and have an eave height of 10 feet or less. The proposed amendment would provide for consistency between the building subcode and one- and two-family dwelling subcode for frost protected footings.

159. At **N.J.A.C. 5:23-3.21(c)4v**, the proposed amendment to Section R405 of the IRC/2006 would retain Table R405.1, entitled “Properties of Soils Classified According to the Unified Soil Classification System,” and would update the IRC reference to the 2006 edition. In addition, the proposed amendment to Section R406.1.2.1 of the one- and two-family dwelling subcode, entitled “Floor hazard areas,” would add an exception for under floor spaces meeting the requirements of FEMA/FIA-TB-11 to provide for

consistency between the building subcode and the IBC/2006.

160. At **N.J.A.C. 5:23-3.21(c)6i**, the proposed amendment to Figure R602.6.1 of the IRC/2006, entitled “Notching and Bored Hole Limitations for Exterior Walls and Bearing Walls,” would retain the current one- and two-family dwelling subcode requirement for 3-8 penny (d) nails, as opposed to eight-16d nails as required by the IRC/2006. If eight 16d nails were used on each side of a 2’ by 4’, there would be no 2’ by 4’ remaining. Therefore, the Department is proposing to retain the current requirement for 3-8d nails.

161. At **N.J.A.C. 5:23-3.21(c)6ii**, the proposed amendment to Section R602.6.1 of the IRC/2006, entitled “Drilling and notching of top plate,” would make a companion change to retain the current requirement for 3-8d nails for consistency with Figure R602.6.1. (See Item 160)

162. The proposal would delete the amendment to Section R602.10.1 of the one- and two-family dwelling subcode, entitled “Wall bracing,” to insert a basic wind speed of “less than 120 mph” for Seismic Design Category D. The Department is proposing to limit the scope of the IRC/2006 to those areas where the wind loads are 100 mph or less. Therefore, the amendment to Section R602.10.1 is no longer necessary. (See Item 139)

163. The proposal would delete the amendment to Table R802.11 of the one- and two-family dwelling subcode, entitled “Required Strength of Truss or Rafter Tie Down Connections to Resist Wind Uplift Forces^{a,b,c,d},” to include values for wind uplift pressures of 70, 80, and 90 psf for basic wind speeds that are greater than 110 mph. The Department is proposing to limit the scope of the IRC/2006 to those areas where wind loads are 100 mph or less. Therefore, the amendment to Table R802.11 is no longer necessary. (See Item 139)

164. At **N.J.A.C. 5:23-3.21(c)7iii**, the proposed amendment to Section R806.4 of the IRC/2006, entitled “Condition attic assemblies,” would delete the exception contained in Condition 2, would delete Condition 3, and would modify Condition 4, which provide criteria that must be met in order for conditioned attic assemblies to be unvented. The exception contained in Condition 2, Condition 3, and Condition 4 of Section R806.4 make reference to Chapter 11 of the IRC/2006, entitled “Energy Efficiency.” Chapter 11 is proposed for deletion because the UCC covers requirements for energy efficiency at N.J.A.C. 5:23-3.18, the energy subcode. Therefore, the Department is proposing that the exception contained in Condition 2 be deleted, that Condition 3 be deleted, and that Condition 4 be modified to eliminate references to a chapter that is proposed for deletion.

165. At **N.J.A.C. 5:23-3.21(c)8i**, the proposed amendments to Section R905.2.7, entitled “Underlayment applications;” Section R905.4.3.1, entitled “Ice barrier;” Section R905.5.3, entitled “Underlayment;” Section R905.6.3.1, entitled “Ice barrier;” Section R905.7.3.1, entitled “Ice barrier;” and Section R905.8.3.1 of the IRC/2006, entitled “Ice barrier,” would provide that ice and water shields be required in areas where the average daily temperature in January is 25 degrees F or less for consistency with the proposed amendments to the IBC/2006. (See Item 55)

166. At **N.J.A.C. 5:23-3.21(c)9i, 9ii, and 9iii**, the proposal would reformat the clearance to combustible requirements for fireplaces, which is necessary as a result of the proposed adoption of the IRC/2006. In the current one- and two-family dwelling subcode, the requirements for clearances to combustibles for fireplaces are contained in Section R1003.12, entitled “Fireplace clearance.” In the IRC/2006, the clearance requirements are contained in Section R1003.18, entitled “Chimney clearances.” Therefore, the

Department is proposing to reformat the amendments to place them under the correct section of the IRC/2006.

167. At **N.J.A.C. 5:23-3.21(c)12iii**, the proposed amendment to Section M1307.4 of the IRC/2006, entitled “Hydrogen generating fuel operations,” would require that hydrogen fuel cell systems be installed in accordance with the applicable requirements of the International Fire Code, the International Building Code, the International Mechanical Code, and the International Fuel Gas Code. Section M1307.4 of the IRC/2006 does not contain adequate requirements for hydrogen generating and refueling operations. Therefore, the Department is proposing to include references to the applicable I-Codes to ensure the protection of life safety.

168. At **N.J.A.C. 5:23-3.21(c)13vii**, the proposed amendments would delete Section M1411.3.2 of the IRC/2006, entitled “Drain pipe materials and sizes,” because requirements for components of condensate disposal systems are covered by the plumbing subcode of the UCC at N.J.A.C. 5:23-3.15.

169. At **N.J.A.C. 5:23-3.21(c)14i**, the proposed amendment to Section M1801.3.2 of the IRC/2006, entitled “Flue passageways,” would replace “free of obstructions and combustible deposits” with “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d).” (See Item 132)

170. At **N.J.A.C. 5:23-3.21(c)18i**, the proposed amendment to Section G2403, entitled “General Definitions,” would delete the definition of “approved” because the term is defined by the UCC.

171. At **N.J.A.C. 5:23-3.21(c)18iii**, the proposed amendment to Section G2404.3 of the IRC/2006, entitled “Listed and labeled,” would insert a cross reference to N.J.A.C. 5:23-

3.7, which provides requirements for the approval of alternative materials.

172. The proposal would delete the amendment to Section G2409 of the one- and two-family dwelling subcode, entitled “Clearance Reduction,” in its entirety because the requirements for listed central heating furnaces have been omitted in the IBC/2006.

173. At **N.J.A.C. 5:23-3.21(c)18vii**, the proposed amendment to Section G2412 of the IBC/2006, entitled “Liquefied petroleum gas storage,” would prohibit the installation of liquefied petroleum gas (LP Gas) containers on roofs of buildings. The National Fire Protection Association’s 58 standard allows the installation of LP Gas containers on roofs; the practice is prohibited in New Jersey.

174. At **N.J.A.C. 5:23-3.21(c)18viii**, the proposed amendment would delete Section G2412.3 of the IRC/2006, entitled “Modifications to existing systems,” because work performed to existing fuel gas piping systems is covered by the rehabilitation subcode at N.J.A.C. 5:23-6.

175. At **N.J.A.C. 5:23-3.21(c)18x**, the proposed amendment to Section G2425.15.2 of the IRC/2006, entitled “Flue passageways,” would replace “free of obstructions and combustible deposits” with “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d).” (See Item 132)

176. At **N.J.A.C. 5:23-3.21(c)21i**, the proposed amendment would update the edition of the NFPA 13D standard, entitled “Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes,” and the NFPA 13R standard, entitled “Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height.”

177. At **N.J.A.C. 5:23-3.21(c)22i**, the proposed amendment would provide that Appendix B, entitled “Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category 1A Appliances, and Appliances Listed for Use with Type B Vents,” and Appendix C, entitled “Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems,” are informational and are not considered a part of the one- and two-family dwelling subcode.

178. The proposal would delete the amendment to the definition of “swimming pool” in Section AG102 of Appendix G of the IRC/2006, entitled “Definitions,” because the definition in the IRC/2006 is consistent with the definition in the current one- and two-family dwelling subcode. At **N.J.A.C. 5:23-3.21(c)22iv**, the proposed amendment would provide that Appendix G shall be adopted as part of the one- and two-family dwelling subcode. In addition, the proposed amendment would provide that the last sentence of Provision 10.1 be deleted to eliminate the requirements that ladders or steps be capable of being secured, locked, or removed. (See Item 78) Finally, the proposed amendment would delete Section AG106, entitled “Entrapment protection for swimming pool and spa suction outlets,” because the provisions in the section are contained in the plumbing subcode.

179. At **N.J.A.C. 5:23-3.21(c)22v**, the proposed amendment would provide that Appendix H, entitled “Patio Covers,” and Appendix K, entitled “Sound Transmission,” are adopted as part of the one- and two-family dwelling subcode.

180. At **N.J.A.C. 5:23-3.21(c)22vi**, the proposed amendment would delete Appendix L, entitled “Permit Fees;” Appendix M, entitled “Home Day Care – R3 Occupancy;” Appendix N, entitled “Venting Methods;” Appendix O, entitled “Gray Water Recycling

Systems;” Appendix P, entitled “Sprinkling;” and Appendix Q of the IRC/2006, entitled “International Residential Code Electrical Provisions/National Electrical Code Cross-References,” are deleted. The provisions contained in the appendixes are covered by the appropriate subcodes of the UCC. Therefore, the Department is proposing that Appendix L, Appendix M, Appendix N, Appendix O, Appendix P, and Appendix Q be deleted in their entirety.

Fuel Gas Subcode (IFGC/2006)

181. At **N.J.A.C. 5:23-3.22**, language and section numbers have been revised and titles of code sections have been inserted for consistency with the format of the building and one- and two-family dwelling subcodes of the UCC.

182. At **N.J.A.C. 5:23-3.22(a)1**, the amendments would propose the adoption of the IFGC/2006 as the fuel gas subcode of the UCC. At **N.J.A.C. 5:23-3.22(a)1ii and (b)**, the proposed amendments would make companion changes to update the references to the 2006 edition of the IFGC.

183. At **N.J.A.C. 5:23-3.22(b)3ii**, the proposed amendment to Section 301.3 of the IFGC/2006, entitled “Listed and labeled,” would delete the second sentence of the section. The sentence contains a reference to Section 105, which is deleted.

184. At **N.J.A.C. 5:23-3.22(b)3v**, the proposed amendment would clarify that “drywell, sump pump, floor drain, or drainage system below floor” is inserted after “approved plumbing fixture.” (See Item 129)

185. At **N.J.A.C. 5:23-3.22(b)4i**, the proposed amendment to Section 401.2 of the IFGC/2006, entitled “Liquefied petroleum gas storage,” would prohibit the installation of

liquefied petroleum gas (LP Gas) containers on roofs of buildings. (See Item 173)

186. At **N.J.A.C. 5:23-3.22(b)4ii**, the proposal would reformat the amendment to Section 401.9 of the IFGC/2006, entitled “Protection from vehicle impact,” to place the amendment in the correct sequential order. Currently, the amendment to add Section 401.9 is listed before the amendments to Section 401.2 of the IFGC/2006. The proposal corrects the order of the amendments.

187. At **N.J.A.C. 5:23-3.22(b)5i and 5ii**, the proposed amendment to Section 501.15.2, entitled “Flue passageways,” and Section 503.5.6 of the IFGC/2006, entitled “Inspection of chimneys,” would replace “free of obstructions and combustible deposits” and “examined to ascertain that it is clear and free of obstructions” with “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d).” (See Item 132)

188. At **N.J.A.C. 5:23-3.22(b)5iii**, the proposed amendments to Section 503.5.6.1 of the IFGC/2006, entitled “Chimney lining,” would make grammatical corrections.

189. At **N.J.A.C. 5:23-3.22(b)6**, the proposal would delete the amendments to Section 623.2, entitled “Prohibited location,” and Section 623.3, entitled “Domestic appliances.” (See Item 133) In addition, the proposal would reformat the amendment to delete Section 627.10 of the IFGC/2006, entitled “Switches in electrical supply line.”

190. At **N.J.A.C. 5:23-3.22(b)7i(1), (2), (3), and (4)**, the proposed amendments to Chapter 8 of the IFGC/2006, entitled “Referenced Standards,” would update the editions of the ICC Electrical Code, the International Existing Buildings Code, the International Energy Conservation Code, and the International Plumbing Code, which are proposed for deletion. In addition, the proposal would delete the amendments to the editions of the

IBC, IFC, and IRC. The current editions of the IBC, IFC, and IRC are included in Chapter 8 of the IFGC/2006.

Social Impact

Adopting the IBC/2006, IRC/2006, NSPC/2006, IMC/2006, and IFGC/2006 would have a positive social impact by maintaining consistency throughout the UCC by providing a single, clear, and up-to-date set of technical standards for construction, which promotes a more uniform enforcement of the construction code.

The proposed amendments to adopt the most recent model energy codes would have a positive social impact by helping to conserve the State's natural resources. As fuel prices rise and the demand for alternative energy sources increases, the need for more thermally efficient homes and buildings also increases. The most recent model energy codes contain cost saving energy conservation requirements. Increased energy conservation requirements will result in an overall decrease in the amount of energy consumed and will preserve help preserve fuel sources.

Economic Impact

The Department anticipates that the proposed amendments to adopt the IBC/2006, IRC/2006, NSPC/2006, IMC/2006, and IFGC/2006 would have a positive economic impact because clear and modern technical standards promote cost effective construction.

The most recent model energy codes include provisions that boost energy efficiency in homes and buildings to reduce the overall amount of energy consumed. Such provisions include requirements for the installation of efficient mechanical equipment, high efficiency windows in some cases, and increased insulation requirements across the State. Because the proposed amendments require upgrades in energy

efficiency, there will be an associated increase in construction costs. However, because newly manufactured mechanical equipment meets today's energy efficiency standards and because the purchase price of high efficiency windows is comparable to the purchase price of standard windows, the Department expects the increase in cost to be moderate. For example, the cost of a typical brand of high efficiency window ranges from \$237 to \$259 per window. Generic brand windows, which can offer the same performance (U-factor) as typical brand high efficiency windows, range from \$151 to \$161 per window. Increased energy conservation requirements must be compared to reductions in monthly heating and cooling costs. New homebuyers and building owners can expect lower monthly energy bills as a result of the proposed amendments, which will payback the increases in construction costs. The payback period decreases as construction costs rise.

Federal Standards Statement

No Federal standards analysis is required for the amendments to adopt the IBC/2006, IRC/2006, NSPC/2006, IMC/2006, and IFGC/2006 because the amendments are not being proposed in order to implement, comply with, or participate in any program established under Federal law or under a State law that incorporates or refers to Federal law, standards, or requirements.

Regarding the proposed adoption of the most recent model energy codes, the Federal Energy Policy Act (EPACT) does not establish requirements for residential energy codes. EPACT simply requires States to analyze their current energy codes to determine whether updates are warranted. Although EPACT does not establish Federal requirements for residential energy codes, the proposed amendments would incorporate

energy saving requirements that will result in more thermally efficient homes.

The proposed amendments to adopt ASHRAE 90.1/2004 for energy requirements for commercial buildings are being made in anticipation of a finding by the Federal government that the newer ASHRAE standard will promote the goals of the US Department of Energy. The proposed amendments would be consistent with this finding.

Jobs Impact

The Department does not anticipate that any jobs would be created or lost as a result of the proposed amendments.

Agriculture Industry Impact

The Department does not anticipate that the proposed amendments would impact the agriculture industry.

Regulatory Flexibility Analysis

The proposed amendments impose technical compliance requirements on builders, some of which are “small businesses” as defined under the Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. The proposed amendments establish code requirements that provide technical standards for construction, plumbing work, and mechanical and fuel gas installations and that promote energy conservation for homes and buildings. Builders would be required to comply with the requirements of the building, plumbing, mechanical, and fuel gas subcodes of the UCC as would any other entity performing construction, plumbing work or mechanical or fuel gas installations in the State.

Any increase in construction costs associated with complying with the energy codes would be balanced by the overall cost effectiveness of the energy conservation requirements (see Economic Impact above). Builders would recoup increases in the cost of construction through the sales prices of new homes and buildings. Building owners would recoup increases in construction costs through energy savings. The proposed amendments would not impose any additional reporting or recordkeeping requirements. In addition, no additional professional services would be required for compliance with the proposed amendments.

Smart Growth Impact

The Department does not expect that the proposed amendments would have any impact upon either the achievement of "smart growth" or implementation of the State Plan.

Full text of the proposal follows (additions indicated in boldface thus; deletions indicated in brackets [thus]):

5:23-3.14 Building subcode

(a) Rules concerning the building subcode are as follows:

1. Pursuant to authority of P.L. 1975, c.217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the model code of the International Code Council, **2006** International Building Code, known as the ["IBC/2000."] **"IBC/2006."** This code is hereby adopted by reference as the building subcode for New Jersey subject to the modifications stated in (b) below.

i. Copies of this code may be obtained from the International Code

Council at 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795.

ii. The [IBC/2000] **IBC/2006**, as amended, may be known and cited as the "building subcode."

2. Any references to the mechanical code, plumbing code, International Residential Code, ICC/**ANSI** A117.1 standard (including reference to Chapter 11) or the ICC Electrical Code listed in Chapter 35 shall be considered a reference to the appropriate adopted mechanical, plumbing, one- and two-family dwelling or electrical subcode referenced in N.J.A.C. 5:23-3 or to the barrier free subcode, N.J.A.C. 5:23-7, as appropriate.

(b) The following chapters of the building subcode are modified as follows:

1. Chapter 1, Administration, shall be deleted in its entirety. In addition, any referenced section of Chapter 1 shall be deleted throughout the code and "the administrative provisions of the Uniform Construction Code (N.J.A.C. 5:23)" shall be inserted.

i. In Section 308.2, Group I-1; Section 308.3, Group I-3; Section 308.5, Group I-4, daycare facilities; Section 310.1, Residential Group R; and Section 1704.1, General, in Exception 3, "as applicable in Section 101.2" shall be deleted.

2. Chapter 2, Definitions, shall be amended as follows:

i. – vi. (No change.)

vii. The [definitions] **definition** of "existing structure[,]" ["historic building," and "jurisdiction"] shall be deleted.

viii. In the definition of "Dwelling Unit," "living as a single

housekeeping unit" shall be inserted after "persons."

ix. The definitions of “historic building” and “jurisdiction” shall be deleted.

Renumber viii – x. as x. – xii. (No change in text.)

3. Chapter 3, Use and Occupancy Classification, shall be amended as follows:

[i. In Section 302.3.3, Separated uses, the first sentence of Exception 2 shall be deleted and the following shall be inserted: "A private garage located beneath a room(s) shall have walls, partitions, floors, and ceilings separating the garage from the adjacent interior spaces constructed with not less than a one-hour fire resistance rating. Attached private garages shall be completely separated from the adjacent interior spaces and the attic area by a means of 1/2 -inch gypsum board or equivalent applied to the garage side."

ii. In Table 302.3.3, Required Separation of Occupancies (Hours) ^a, Use Group U shall be deleted.]

[iii.] **i.** Section 308.2, Group F1, shall be amended as follows: In the first sentence, "16" shall be deleted and "5" shall be inserted. In the second sentence, "responding to" shall be deleted and "slow evacuation [as defined in Section 22-1.3 of NFPA 101-97, referenced in Chapter 35,] in" shall be inserted. **In addition, “For the purposes of applying this provision, slow evacuation shall mean the movement of all occupants, residents, and staff to an exit in more than three minutes, but not more than thirteen minutes.” shall be inserted as the third sentence.** In [the third sentence] **the list of types of occupancies,** "residential board and care facilities, assisted living

facilities" shall be deleted and "boarding houses" shall be inserted. In the same [sentence] list, "abuse" shall be inserted after "drug." Also, "A facility such as above, housing at least six and not more than 16 persons shall be classified as a Group R-4" shall be deleted and the following definition of "boarding house" shall be inserted:

"Boarding House: A building arranged or used for single occupancy where meals or personal or financial services are provided to the residents."

[iv.] ii. In Section 308.3, Group I-2, "who are not capable of self-preservation" shall be deleted and "where evacuation is impractical [as defined in Section 22-1.3 of NFPA 101-97, referenced in Chapter 35]" shall be inserted. **For the purposes of applying this provision, impractical evacuation shall mean the movement of all occupants, residents, and staff to an exit in more than thirteen minutes.** In the [second sentence, a comma shall be inserted after "to" and] **list of types of occupancies,** "assisted living facilities" shall be inserted [before "mental hospitals."].

Renumber v. as iii. (No change in text.)

[vi.] Iv. In Section 308.5.1, Adult Care Facility, "accommodations for less than 24 hours for more than five unrelated adults and provides" shall be deleted, "services" shall be deleted after "care," and the following shall be inserted: "on less than a 24-hour basis where evacuation is slow or impractical [as defined in Section 22-1.3 of NFPA 101-97, referenced in Chapter 35], shall be classified as Group I-4. **For the purposes of applying this provision, impractical evacuation shall mean the movement of all occupants, residents, and staff to an exit in more than thirteen minutes and slow evacuation shall mean the movement of all occupants, residents, and staff to an exit in more than three minutes, but not more than thirteen**

minutes.” [Where evacuation is prompt, the facility shall be classified as Group A-3.”]
In the exception, “of responding to an emergency situation” shall be deleted and “of prompt evacuation” shall be inserted. In addition, “For the purposes of applying this provision, prompt evacuation shall mean the movement of all occupants, residents, and staff to an exit in three minutes or less.” shall be inserted as the second sentence.

Renumber vii. as v. (No change in text.)

[viii.] **Vi.** Section 310, Residential Group R, shall be deleted and the following definitions shall be inserted:

"(1) R-1 Residential occupancies **containing sleeping units** where the occupants are primarily transient (less than 30 days) including:

Hotels (including motels) having transient occupancy

Rooming houses, with more than five residents, having transient occupancy

(2) R-2 Residential occupancies containing **sleeping units** **or** more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Convents

Dormitories

Fraternity and sorority houses

Hotels (non transient)

Monasteries

Motels (non transient)

Rooming houses with more than five residents, not having transient occupancy

Therapeutic residences with more than 16 residents

Vacation timeshare properties

(3) (No change.)

(4) R-4 Therapeutic residences including more than five but not more than 16 occupants, excluding staff[, capable of prompt evacuation as defined by Section 22-1.3 of NFPA 101-97, referenced in Chapter 35].

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided in the code.

(5) (No change.)

4. Section 310.2, Definitions, shall be amended as follows:

i. (No change.)

[ii. In the first sentence of the definition of "Dwelling Unit," "living as a single housekeeping unit" shall be inserted after "persons" and before "including."]

Renumber iii. – v. as ii. – iv. (No change in text.)

[vi.] **v.** The definition of "Single Residential Occupancy" shall be inserted as follows: "Single Residential Occupancy: A building arranged or used for individual

non-transient residency by persons living independently of one another, regardless of whether the residents share the use of common facilities, such as kitchen or bathing facilities."

[vii] **Vi.** The definition of "Therapeutic Residence" shall be inserted as follows: "Therapeutic Residence: A residence for adults, each of whom is capable of prompt evacuation [as defined by Section 22-1.3 of NFPA 101-97, referenced in Chapter 35], and who live within a single dwelling unit for therapeutic purposes, without a resident landlord or operator, but with some government or private social service provider oversight. **For the purposes of applying this provision, prompt evacuation shall mean the movement of all occupants, residents, and staff to an exit in three minutes or less.**"

Renumber viii. as vii. (No change in text.)

5. Chapter 4, Special Detailed Requirements Based on Use and Occupancy, shall be amended as follows:

i. (No change.)

ii. In Section 403.11, Emergency power systems, "Section 2702" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

iii. In Section 406.1.4, Separation, Item 1 shall be deleted and the following text from the 2000 International Building Code as amended by New Jersey shall be inserted:

"1. A private garage located beneath a room(s) shall have walls, partitions, floors, and ceilings separating the garage from the adjacent

interior spaces constructed with not less than a one-hour fire resistance rating (See FTO 13). Attached private garages shall be completely separated from the adjacent interior spaces and the attic area by a means of 1/2-inch gypsum board or equivalent applied to the garage side. Door openings between the garage and the residence shall be equipped with either solid wood doors not less than 13/8 inches (35 mm) thick, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick or doors in compliance with Section 715.4.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. "

Renumber ii. as iv. (No change in text.)

v. In Section 412.1.5, Standby power, "Section 2702" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

vi. In Section 412.1.6, Accessibility, "Chapter 11" shall be deleted and "the barrier free subcode (N.J.A.C. 5:23-7)" shall be inserted.

vii. In Section 414.5.4, Standby or electrical power, "this code or the ICC Electrical Code" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

viii. In Section 417.1, General, "Chapter 28" shall be deleted and "the mechanical subcode (N.J.A.C. 5:23-3.20)" shall be inserted.

ix. In Section 420.8, Standby power, "Chapter 27" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

6. Chapter 5, General Building Heights and Areas, shall be amended as follows:

i. Table 503, Allowable Heights and Building Areas, shall be amended as

follows:

(1) – (8) (No change.)

(9) [The] Under construction Type IA for Group H-2, “UL” shall be deleted and “3” shall be inserted. In addition, the maximum number of stories and maximum allowable area for Group H-2, construction Type VB shall be deleted and "NP" shall be inserted.

(10) Under construction Type IA for Group H-3, “UL” shall be deleted and “7” shall be inserted. In addition, under construction Type IIIA for Group H-3, "4" shall be deleted and "3" shall be inserted.

(11) Under construction Type IA for Group H-4, “UL” shall be deleted and “7” shall be inserted. In addition, under construction Type IIIA for Group H-4, "5" shall be deleted and "4" shall be inserted.

(12) [The] Under construction Type VA for Group I-3, “2” shall be deleted and “1” shall be inserted. In addition, the maximum number of stories and the maximum allowable area for Group I-3, construction Type VB shall be deleted and "NP" shall be inserted.

(13) – (16) (No change.)

(17) Under construction Type IB for Group R-4, "11" shall be deleted and "4" shall be inserted. Under construction Type IIB for Group R-4, "4" shall be deleted and "3" shall be inserted. In addition, under construction Type IIIB for Group R-4, "4" shall be deleted and "3" shall be inserted. [Finally, under construction Type VB for Group R-4, "3" shall be deleted and "2" shall be inserted.]

(18) – (20) (No change.)

[(21) At the end of the table, after "UL = Unlimited," "NP = Not permitted" shall be inserted.]

ii. In Section 505.4, Openness, Exception 5 shall be deleted in its entirety.

[ii]. **iii.** Section [507.1]**507.2**, Unsprinklered, one story, shall be deleted in its entirety.

[iii.] **iv.** Section [507.3] **507.4**, Two-story, shall be amended as follows: In the first sentence, "building of Type I or Type II construction under " shall be inserted after "two-story."

v. In Table 508.3.3, Required Separation of Occupancies (Hours), “U^d” shall be deleted in the fourth row of the table.

7. Chapter 6, Types of Construction, shall be amended as follows:

i. (No change.)

ii. In Section 602.3, Type III, **“(See FTO 14)” shall be inserted after “materials.” In addition,** the [last] **second** sentence shall be deleted.

8. Chapter 7, Fire-Resistance-Rated Construction, shall be amended as follows:

i. (No change.)

ii. Section 705.5, Horizontal continuity, **Section 705.5.1, Exterior walls, and Section 705.5.2, Horizontal projecting elements,** shall be deleted in [its] **their** entirety. Section 707.6 of the 1996 BOCA National Building Code shall be inserted as

follows: "Horizontal Continuity. Firewalls shall be made smoke tight at the junction of exterior walls. In exterior wall construction employing studs, the wall shall extend through the stud space to the exterior sheathing."

iii. In Section 707.2, Shaft enclosure required, Exception 11 shall be deleted in its entirety.

[iii.] **iv.** Section 707.14.1, Elevator lobby, shall be amended as follows:

In the first sentence, "In buildings having occupied floors greater than 75 feet above the lowest level of fire department vehicle access" shall be inserted before ["elevators."] **"An."** In the same section, Exception 4 shall be deleted in its entirety.

v. Section 707.14.2, Enclosed elevator lobby pressurization alternative, shall be deleted in its entirety.

9. Chapter 9, Fire Protection Systems, shall be amended as follows:

i. In Section 903.1.1, Alternative protection, "fire code official" shall be deleted and "fire protection subcode official" shall be inserted.

ii. New Section 903.1.2, Residential systems, shall be inserted as follows:

"903.1.2.1 Residential systems. Unless specifically allowed by this code, residential sprinkler systems installed in accordance with NFPA 13D or NFPA 13R shall not be recognized for the purpose of exceptions or reductions permitted by other requirements of this code.

Re-number i. as iii. (No change in text.)

[ii. Section 903.2.8, Group R-2, shall be deleted in its entirety. Section

904.9 of the 1996 BOCA National Building Code shall be inserted as follows: "Group R-2: An automatic fire sprinkler system shall be provided throughout all buildings with an occupancy in Group R-2 in accordance with Section 903.3.1.1 or 903.3.1.2:

Exception: Buildings that do not exceed two stories including basements, which are not considered a story above grade, and with a maximum of 12 dwelling units per fire area. Each dwelling unit shall have at least one door opening to an exterior exit access that leads directly to the exits required to serve the dwelling unit.

iii. In Section 903.2.9, Group R-4, the reference to "Section 903.3.1.3" shall be deleted.]

iv. Section [903.2.12.1] **903.2.10.1**, Stories and basements without openings, shall be deleted in its entirety and Section 904.10 of the 1996 BOCA National Building Code shall be inserted as follows: "Windowless story: An automatic fire sprinkler system shall be provided throughout every story or basement of all buildings where there is not provided at least one of the following types of openings:

1. – 2. (No change.)

v. New Section [903.2.16] **903.2.14**, Automatic sprinkler system thresholds, shall be inserted as follows: "An automatic sprinkler system shall be required in accordance with Section 903.3.1.1 when the maximum area is exceeded for the following construction types of Groups B, F-2, and S-2 according to table 903.2.16, Automatic Sprinkler System Thresholds. All others not listed shall follow the applicable requirements as set forth in the [IBC/2000] **IBC/2006**."

"Automatic Sprinkler System Thresholds
Group

B			
	IIB	IIIB	VB
Story	Max. Area	Max. Area	Max. Area
1	36,000	*	*
2	72,000 (36,000 per floor)	*	*
3	99,360 (36,000 per floor)	99,360 (36,000 per floor)	*
Group F-2			
	IIB	IIIB	VB
Story	Max. Area	Max. Area	Max. Area
1	36,000	*	18,000
2	72,000 (36,000 per floor)	*	36,000 (18,000 per floor)
3	99,360 (36,000 per floor)	*	*
Group S-2a			
	IIB	IIIB	VB
Story	Max. Area	Max. Area	Max. Area
1	36,000	36,000	18,000
2	72,000 (36,000 per floor)	72,000 (36,000 per floor)	36,000 (18,000 per floor)
3	99,360 (36,000 per floor)	99,360 (36,000 per floor)	*

a. Exception--Open parking structures in accordance with Section 406.3

*Requirements as set forth in the [IBC/2000] **IBC/2006**"

[vi. Section 903.3.2, Quick response and residential sprinklers, shall be deleted in its entirety.]

vi. Section 903.3.1.2.1, Balconies and decks, shall be deleted in its entirety.

vii. In Section 903.3.5, Water supplies, "International Plumbing

Code” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

viii. In Section 903.3.6, Hose threads, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

ix. In Section 903.4.1, Signals, “or, when approved by the fire code official, shall sound an audible signal at a constantly attended location” shall be deleted. In addition, in the same section, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

Renumber vii. as x. (No change in text.)

xi. In Section 904.2, Where required, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

Renumber viii. as xii. (No change in text.)

xiii. New Section 905.3.2 shall be inserted as follows:

“905.3.2 Building area. In buildings exceeding 10,000 square feet (929 m2) in area per story, Class I automatic wet or manual wet standpipes shall be provided where any portion of the building’s interior area is more than 200 feet (60 960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access.

Exceptions:

1. Buildings equipped throughout with automatic sprinkler systems installed in accordance with Section 903.3.1.1.

2. Group A-4, A-5, F-2, R-2, S-2 or U occupancies.

3. Automatic dry and semiautomatic dry standpipes are allowed as provided for in NFPA 14.

xiv. Sections 903.5.3.2 through 903.5.3.7 shall be renumbered as 903.5.3.3 through 903.5.3.8 with no change in text.

Renumber ix. as xv. (No change in text.)

xvi. In Section 905.4, in Item 6, Location of Class I standpipe hose connections, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

Renumber x. as xvii. (No change in text.)

xviii. In Section 905.5.3, Class II system 1-inch hose, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

[xi. Section 906.0, Portable Fire Extinguishers, shall be deleted in its entirety and new Section 906.0, entitled "Fire Department Connections," from Section 916.0 of the 1996 BOCA National Building Code shall be inserted as follows: "906.1 Required: All required water fire-extinguishing and standpipe systems shall be provided with a fire department connection in accordance with the applicable standards. Standpipes in buildings under construction or demolition shall conform to Section 3311.

Exceptions

1. Limited area sprinkler systems supplied from the domestic water system.

2. Where the local fire department approves a single connection for a large diameter hose of at least four inches (102 mm).

3. An automatic sprinkler system with less than 20 sprinklers.

906.2 Connections: Fire department connections shall be arranged in such a manner that the attachment to any one sprinkler connection will serve all sprinklers, and the attachment to any one standpipe connection will serve all standpipes within the building.

Exception: Fire protection systems in high rise buildings designed with a low zone and a high zone may be provided with a connection for each zone.

906.3 Location: Fire department connections shall be located and shall be visible on a street front or on a location approved by the fire department. Such connections shall be located so that immediate access is provided to the fire department. Fire department connections shall not be obstructed by fences, bushes, trees, walls, or any other similar object.

906.4 Height: Fire department connections shall not be less than 18 inches (457 mm) and more than 42 inches (1,067 mm) in elevation, measured from the ground level to the centerline of the inlets.

906.5 Projection: Where the fire department connection will otherwise project beyond the property line or into the public way, a flush-type fire department connection shall be provided.

906.6 Hose thread: Hose thread in the fire department connection shall be uniform with that used by the local fire department.

906.7 Fittings: Fire department inlet connection shall be fitted with check valves, ball drip valves and plugs with chains or frangible clips.

906.8 Signs: A metal sign with raised letters at least one inch (25 mm) in height shall be mounted on all fire department connections serving sprinklers or standpipes. Such signs shall read "Automatic Sprinklers" or "Standpipes," or both, as applicable."

xii. Sections 907.2.6 and 907.2.8 are amended as indicated at N.J.A.C. 5:23-3.17(a)1i(5).]

xix. In Section 907.2.6, Group I, the following shall be inserted at the end of the section: "Alarms activated by smoke detectors required by this section shall be activated by a single smoke detector monitored by an alarm verification zone or an approved equivalent method."

xx. In Section 907.2.8, Group R-1, the following shall be inserted at the end of the section: "Alarms activated by smoke detectors required by this section shall be activated by a single smoke detector monitored by an alarm verification zone or an approved equivalent method."

xxi. In Section 907.2.10, Single- and multiple-station smoke alarms, the following shall be inserted at the end of the section: "Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detectors and audible notification devices installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms in the event the fire alarm panel is removed or the system is not connected to a central station."

[xiii. Section 907.2.10.1.4, Additions, alterations, or repairs to Group R,

shall be deleted in its entirety.

xiv. In Section 907.2.10.3, Interconnection, Exception 2 shall be deleted in its entirety.]

xxii. In Section 907.3.5, Protective covers, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxiii. In Section 907.7, Presignal system, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxiv. Section 907.9.1.2, Employee work area, is deleted in its entirety.

xxv. In Section 909.5.1, Leakage area, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxvi. In Section 909.7, Airflow design method, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxvii. In Section 909.8, Exhaust method, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxviii. In Section 909.9, Design fire, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxix. In Section 909.10, Equipment, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxx. In Section 909.15, Control diagrams, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

[xv.] **xxxi.** In Section [909.18.8.3] **909.18.8.3**, Reports, "The report shall

be reviewed by the **responsible** registered design professional and, when satisfied that the design intent has been achieved, the responsible registered design professional shall seal, sign, and date the report" shall be deleted.

xxxii. In Section 909.18.8.3.1, Report filing, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxxiii. In Section 909.19, System acceptance, “fire code official” shall be deleted and “fire protection subcode official” shall be inserted.

xxxiv. In Section 909.20.6.3, Acceptance and testing, “Section 2702” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

xxxv. In Section 912.1, Installation, insert the following at the end of the section:

“Exceptions

1. Limited area sprinkler systems supplied from the domestic water system.

2. Where the local fire department approves a single connection for a large diameter hose of at least four inches (102 mm).

3. An automatic sprinkler system with less than 20 sprinklers.”

xxxvi. New section 912.2, Connections, shall be inserted as follows:

“912.2 Connections: Fire department connections shall be arranged in such a manner that the attachment to any one sprinkler connection will serve all sprinklers, and the attachment to any one standpipe connection will serve all

standpipes within the building.

Exception: Fire protection systems in high rise buildings designed with a low zone and a high zone may be provided with a connection for each zone.”

xxxvii. Section 912.2, Location, shall be renumbered as 912.3 with no change in text. Additionally, Section 912.2.2, Existing buildings, shall be deleted in its entirety.

xxxviii. New Section 912.4, Height, shall be inserted as follows:

“912.4, Height Fire department connections shall not be less than 18 inches (457 mm) and more than 42 inches (1,067 mm) in elevation, measured from the ground level to the centerline of the inlets.”

xxxix. Sections 912.3, Access and 912.4, Signs shall be renumbered as 912.5 and 912.6 respectively, with no change in text.

xl. In Section 912.5, Backflow protection, “International Plumbing Code” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

10. Chapter 10, Means of Egress, shall be amended as follows:

i. The terms “Type A unit,” “Type B unit,” and “Accessible Unit” shall be deleted and “Adaptable or Accessible Unit” shall be inserted in the following sections: Section 1008.1.1, Exceptions 7 and 8; Section 1008.1.4, Exceptions 3 and 5; Section 1008.1.6, Exception; and Section 1008.1.7, Exception 3.

ii. In Section 1002, Definitions, in the definition of “Merchandise Pad,” “as indicated in Section 105.2” shall be deleted.

iii. In Section 1003.2, Ceiling height, “7 feet 6 inches (2286 mm)” shall be deleted and “7 feet (2134mm)” shall be inserted.

[i. In Section 1003.2.12.1, delete the exception and insert the following text: "For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, porches, balconies or raised floor surfaces located more than 30 inches (762 mm) above the floor or grade below shall have guards not less than 36 inches (914 mm) in height. Open sides of stairs with a total rise of more than 30 inches (762 mm) above the floor or grade below shall have guards not less than 34 inches (864 mm) in height measured vertically from the nosing of the treads."

ii. In Section 1003.2.12.2, at the end of the second sentence, insert the following text: "except for occupancies of Group R-3, and within individual dwelling units in occupancies of Group R-2."

iii. In Section 1003.3.1.3.5, Security grilles, "In Groups B, F, M, and S" shall be deleted and "horizontal" shall be capitalized.]

iv. In Section 1003.5, Elevation change, in Exceptions 1, 2, and 3, “Chapter 11” shall be deleted and “the barrier free subcode (N.J.A.C. 5:23-7)” shall be inserted.

v. In Section 1004.1.1, Areas without fixed seating, the exception shall be deleted in its entirety.

vi. In Section 1004.2, Increased occupant load, “7 square feet (.65 m²)” shall be deleted and “5 square feet (.47 m²)” shall be inserted.

vii. In Section 1007.5, Platform lifts, “Section 2702.2.6” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

viii. In Section 1008.1.3.5, Security grilles, “In Groups B, F, M, and S” shall be deleted and “horizontal” shall be capitalized.

ix. In Section 1008.1.4, Floor elevation, in Exception 3, “7.75 inches (197 mm)” shall be deleted and “8.25 inches (210 mm)” shall be inserted.

x. In Section 1008.1.6, Thresholds, in the exception, “7.75 inches (197 mm)” shall be deleted and “8.25 inches (210 mm)” shall be inserted.

[iv.] **Xi.** [In Section 1003.3.1.4, in Exception 1, the text "more than three stories high" shall be deleted.] **In Section 1008.1.8.1, Hardware, “locks” shall be deleted. In the same section, “Chapter 11” shall be deleted and “the barrier free subcode (N.J.A.C. 5:23-7)” shall be inserted.**

[v.] **xii.** Section [1003.3.1.8] **1008.1.8.3**, Locks and latches, shall be amended as follows: In [Exception] **Item** 2, "Group A having an occupant load of 300 or less" shall be deleted. **In the same item, “and in places of religious worship” shall be deleted.** In the same section, [Exception] **Item** 5 shall be inserted as follows: "5. Key operation shall be permitted from a dwelling unit provided that the key cannot be removed from the lock when the door is locked from the side from which egress is made."

[vi.] **xiii.** In Section [1003.3.1.8.2] **1008.1.8.6**, Delayed egress locks, "E" shall be deleted.

[vii.] **Xiv.** In Section [1003.3.3.3.] **1009.3, Stair tread and risers,** Exception [5] **4**, change the maximum riser height from "7.75 inches (197 mm)" to "8.25 inches (210 mm)" [and], change the minimum tread depth from "10 inches (254 mm)" to "9 inches (229 mm)" **and change the minimum winder tread depth at the walk line**

from “10 inches (254 mm)” to “9 inches (229 mm).” In the same section, Exception 5 shall be deleted.

[viii. In Section 1003.3.3.7, delete the exception and insert the following text: "Exception: For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, circular stairways shall have a tread depth at a point not more than 12 inches (305 mm) from the side where the treads are narrower of not less than 11 inches (279 mm) and the minimum depth of any tread shall not be less than 9 inches (229 mm)."

ix. In Section 1003.3.3.8 add the following text: "Exception: For occupancies of Group R-3, and within individual dwelling units of Group R-2, winders are permitted, provided that the width of the tread at a point not more than 12 inches (305 mm) from the side where the treads are narrower is not less than 9 inches (229 mm) and the minimum width of any tread is not less than 6 inches (152 mm). The continuous handrail required by Section 1003.3.3.11 shall be located on the side where the tread is narrower."]

[x.] **xv.** In Section [1003.3.3.11,] **1009.10, Handrails,** [delete] Exception 4 **and 5 shall be deleted** [,] and [insert] the following [text] **shall be inserted:** "4. For occupancies of Group R-3, and within the individual dwelling **units and sleeping units** of Group R-2, handrails shall not be required for stairways with fewer than three risers."

[xi.] **Xvi.** In Section [1003.3.3.11.1,] **1012.2, Height,** add the following text: "Exception: For occupancies of Group R-3, and within individual dwelling units in occupancies of Group R-2, handrails shall have a minimum height of 30 inches and a maximum height of 38 inches measured vertically from the nosing of the treads."

[xii.] **xvii.** After Section [1003.3.3.11.3,] **1012.3, Handrail graspability,**
[add] the following text **shall be inserted:** "Exception: For occupancies of Group R-3,
and within individual dwelling units in occupancies of Group R-2, the handgrip portion
of handrails shall have a maximum circular cross section of 2.625 inches (67 mm). Other
handrail shapes that provide an equivalent grasping surface are permissible."

[xiii. In Section 1004.2.2.1, two exit or exit access doorways, the last
sentence of Exception 1 shall be deleted.]

**xviii. In Section 1013.2, Height, Exception 1 shall be deleted and the
following shall be inserted: "For occupancies in Group R-3 and within individual
dwelling units in occupancies of Group R-2, porches, balconies or raised floor
surfaces located more than 30 inches (762 mm) above the floor or grade below shall
have guards not less than 36 inches (914 mm) in height. Open sides of stairs with a
total rise of more than 30 inches (762 mm) above the floor or grade below shall have
guards not less than 34 inches (864 mm) in height measured vertically from the
nosing of the treads."**

**xix. In Section 1013.3, Opening limitations, at the end of the second
sentence, the following shall be inserted: "except for occupancies of Group R-3, and
within individual dwelling units in occupancies of Group R-2."**

[xiv.] **xx.** Section [1004.2.3] **1014.2,** Egress through intervening spaces,
shall be deleted in its entirety. Section 1006.2.1 of the 1996 BOCA National Building
Code shall be inserted as follows: "Egress through adjoining spaces: Egress from a room
or a space shall not pass through adjoining or intervening rooms or areas, except where

such adjoining rooms or areas are accessory to the area served; are not a high-hazard occupancy; and provide a discernable path of travel to an exit. A maximum of one exit access shall be permitted to pass through a kitchen, storeroom, restroom, closet or similar space provided that a passage through such space is not the only means of access to an exit. An exit access shall not pass through a room subject to locking. Means of egress from dwelling units or sleeping areas shall not lead through other dwelling units or sleeping areas and shall not lead through toilet rooms or bathrooms."

[xv. In the title of In Section 1004.3.2, Corridors, "and passageways" shall be inserted after "corridors."]

[xvi.]**xxi.** In Table [1004.3.2.1] **1017.1**, Corridor Fire Resistance Rating, under the heading "Occupancy," "U" shall be deleted from the third row. **In addition, "Not Permitted" shall be deleted from the fifth row and "1" shall be inserted.**

[xvii. In the title of Section 1004.3.2.2, "and passageway" shall be inserted after "Corridor." In addition, in the first sentence, "or passageway" shall be inserted after "corridor."

xviii. Section 1004.3.2.3, Dead ends, shall be amended as follows: In the first sentence "and passageways" shall be inserted after "corridors." In Exception 1, "or passageway" shall be inserted after "corridor." In Exception 2, "and passageways" shall be inserted after "corridors." In Exception 3, "or passageway" shall be inserted after each "corridor."]

[xix.] **xxii.** In Table [1005.2.2] **1019.2**, Buildings with One Exit, under the heading "Occupancy," "U" shall be deleted from the first row.

[xx.] **xxiii.** In Section [1005.3.2] **1020.1**, Vertical exit enclosures, Exception 1 shall be deleted and the following shall be inserted: "1. In other than Group H and I occupancies, a stairway connecting not more than two floor levels, one of which is the level of exit discharge, which serves an occupant load of not more than 10 or serves four or fewer dwelling units is not required to be enclosed." In the same section, Exception 8 **and 9** shall be deleted.

[xxi.] **xxiv.** Section [1005.3.5] **1022**, Horizontal exits, shall be deleted in its entirety. Section 1019.0 of the 1996 BOCA National Building Code shall be inserted as follows: "Horizontal Exits

[1005.3.5] **1022.1** General: Horizontal exits shall be accepted as an approved exit element of a required means of egress. The connection between an area of a building that the horizontal exit serves and the area of refuge as herein required shall be accomplished by protected openings in a fire-resistance rated wall, or by an open-air balcony or bridge.

[1005.3.5.1] **1022.2** Separation: The separation between buildings or areas of refuge connected by a horizontal exit shall be provided by at least a two-hour fire-resistance rated firewall or fire separation assembly with approved opening protectives complying with Chapter 7 and Table 602.

[1005.3.5.2] **1022.3** Doors: All doors shall swing in the direction of egress travel. Where the horizontal exit serves as an exit from both sides of the wall, there shall be adjacent openings with swinging fire doors opening in opposite directions.

Exception: Horizontal sliding doors complying with Section [1003.3.1.3.3] **1008.1.3.3.**

[1005.3.5.3] **1022.4** Area of refuge: The discharge area of a horizontal exit shall be either public areas or spaces occupied by the same tenant, and each such area of refuge shall be adequate to hold the total occupant load of both connected areas. The capacity of areas of refuge shall be computed on a minimum net floor area allowance for each occupant to be accommodated therein, not including areas of stairways, elevators and other shafts or courts, as follows:

1. 30 square feet (3 m²) per patient for hospitals and nursing homes.
2. Six square feet (0.56 m²) per occupant on stories not housing patients confined to a bed or litter in an occupancy in Group I-2.
3. Six square feet (0.56 m²) per occupant in an occupancy in Group I-3.
4. Three square feet (0.28 m²) in all other cases.

[1005.3.5.4] **1022.5** Egress from area of refuge: The path of egress travel from the horizontal exit through the area of refuge to another exit shall be continuously available. In other than occupancies in Group I-3, there shall be at least one exit on each side of the horizontal exit, which is not a horizontal exit. Any area of refuge not having access to an exit, other than a horizontal exit, shall be considered as part of an adjoining area of refuge with such exit. In the area(s) served by the horizontal exit, the length of exit access travel distance to the horizontal exit or another exit shall not exceed the requirements of Section [1004.2.4] **1016.1**."

xxv. Section 1025.1.1, Bleachers, shall be deleted in its entirety.

[xxii.] **Xxvi.** Section [1009.1] **1026.1**, General, shall be amended as follows: In the second sentence, "Basements and" shall be deleted and "sleeping" shall be

capitalized. In the same section, Exception 4 shall be deleted its entirety. In Exception 6, “basements or” shall be deleted. In addition, Exception 7 shall be deleted in its entirety.

11. (No change.)

12. Chapter 12, Interior Environment, shall be amended as follows:

i. Section 1204, Temperature Control, shall be deleted in its entirety.

Renumber 12. as 13. (No change in text.)

14. Chapter 14, Exterior Walls, shall be amended as follows:

i. In Section 1403.2, Weather protection, “International Energy Conservation Code” shall be deleted and “the energy subcode, N.J.A.C. 5:23-3.18” shall be inserted.

ii. In Section 1405.10.4, “Grounding, “Chapter 27 of this code and the ICC Electrical Code” shall be deleted and “the electrical subcode, N.J.A.C. 5:23-3.16” shall be inserted.

[13.] 15. Chapter 15, Roof Assemblies and Rooftop Structures, shall be amended as follows:

i. (No change.)

ii. In Section 1507.2.8.2, Ice dam membrane, “In areas where there has been a history of ice forming along the eaves causing a backup of water,” shall be deleted and “In areas where the average daily temperature in January is 25°F (- 4°C) or less,” shall be inserted.

[14.] 16. Chapter 16, Structural Design, shall be amended as follows:

i. – ii. (No change.)

iii. New Section [1604.9] **1604.11**, General structural integrity, from Section 1604.2 of the 1996 BOCA National Building Code, shall be inserted as follows:
“The requirements for general structural integrity shall be in accordance with Section 1.4 of ASCE 7 listed in Chapter 35.”

iv. – vii. (No change.)

viii. In Section 1612.1, General, in the first sentence, “including substantial improvement and restoration of substantial damage to buildings and structures” shall be deleted.

[viii.] **ix.** Section [1614.1.1] **1613.3**, [Addition to e]~~E~~Existing building, shall be deleted in its entirety.

[ix. Section 1614.2, Change of Occupancy, shall be deleted in its entirety.

x. Section 1614.3, Alterations, shall be deleted in its entirety.

xi. New Section 1607.14, entitled "Residential Attics with trusses," from Section 1606.2.3 of the 1996 BOCA National Building Code, shall be inserted as follows:

"A storage live load shall be applied to those portions of the bottom chord of not less than two adjacent trusses with the same web configuration containing a rectangle 42 inches (1067 mm) high or greater by 2 feet (610 mm) wide or greater, located within the plane of the truss. The rectangle shall fit between the top of the bottom chord and the bottom of any other truss member, provided each of the following criteria are met:

1. The attic area is accessible by a permanent stairway, pull down stairway, or scuttle opening meeting the size requirement specifications of Section 1208.2, and

2. The truss shall have a bottom chord pitch less than 2 in 12."

xii. In Section 1621.1.7, Component anchorage #1, Item 1 shall be deleted in its entirety.

xiii. In Section 1621.3.14, Elevator design requirements, at the end of the section, the following shall be inserted: "The scope of Part XXIV of ASME A17.1, entitled "Elevator Safety Requirements for Seismic Risk Zone 2 or Greater," is deleted."

xiv. In Table 1622.2.5(2), Importance Factor (I) and Seismic Use Group Classification for Nonbuilding Structures, at Notes H-II and H-III, "authority having jurisdiction" shall be deleted and "construction official" shall be inserted.]

[15.] **17.** Chapter 17, Structural Tests and Special Inspections, shall be amended as follows:

i. – xi. (No change.)

xii. Table 1704.9, Required Verification and Inspection of Pier Foundations, shall be deleted in its entirety.

[xii.]**xiii.** In Section 1705.1, [Scope] **Seismic resistance**, "for Seismic Design Category D buildings" shall be inserted after ["provided."] **“inspections.”**

[xiii.]**xiv.** Sections [1706, Quality Assurance for Wind Regulations] **1705.4, Wind resistance; 1704.4.1, Wind requirements in the statement of special inspections; and 1704.4.2, Detailed requirements**, shall be deleted in [its] **their** entirety.

xv. In Section 1706.1, Contractor responsibility, in the first sentence, “wind or” shall be deleted. In addition, in the same sentence, “or a wind-“ shall be

deleted.

[xiv.]**xvi.** Sections 1708.1, Masonry, 1708.1.1, Empirically designed masonry and glass unit masonry in [nonessential facilities] **Occupancy Category I, II, or III**, 1708.1.2, Empirically designed masonry and glass unit masonry in [essential facilities] **Occupancy Category IV**, 1708.1.3, Engineered masonry in [nonessential facilities] **Occupancy Category I, II, or III**, 1708.1.4, Engineered masonry in [essential facilities] **Occupancy Category IV**, 1708.3, Reinforcing and pre-stressing steel, 1708.4, Structural [tests] **steel**, and 1708.5, **Seismic qualification of** [M]**mechanical** and electrical equipment, shall be deleted in their entirety.

Renumber xv. as xvii. (No change in text.)

[16.] **18.** Chapter 18, Soils and Foundations, shall be amended as follows:

i. (No change.)

ii. New Section 1802.2.8 from Section 1802.1 of the 1996 BOCA National Building Code shall be inserted as follows: "Building Height: For all buildings that are more than three stories or 40 feet (12,192 mm) in height **above the grade plain**, the building official shall request soil tests."

iii. (No change.)

iv. In Section 1802.6, Reports, "soil borings are required" shall be inserted after "Where" **in the second sentence.**

[v. In Section 1805.2.1, Frost protection, "400 square feet (37 m²)" shall be deleted and " 100 square feet (9.25 m²)" shall be inserted.

vi. In Section 1806.3.1, Floors, "60" shall be deleted and "6" shall be

inserted.

vii.] **v.** New Section [1806.5] **1807.5** from Section 1813.8 of the 1996 BOCA National Building Code shall be inserted as follows: "[1806.5] **1807.5** Erosion protection: Where water impacts the ground from the edge of the roof, downspout, scupper or other rain water collection or diversion device, provisions shall be made to prevent soil erosion and direct the water away from the foundation."

vi. In Section 1808.2.1, Design, in Item 1, "and U" shall be deleted.

[viii.] **vii.** Section [1807.2.6] **1808.2.2, General, Item 2,** [Spacing,] shall be deleted in its entirety and Section 1816.9 of the 1996 BOCA National Building Code shall be inserted as follows: "**1808.2.2.1** Spacing: The minimum center-to-center spacing of piles shall not be less than twice the average diameter of a round pile, nor less than 1 3/4 times the diagonal dimension of a rectangular pile. Where driven to or penetrating into rock, the spacing shall not be less than 24 inches (610 mm). Where receiving principal support at the end from materials other than rock, or through friction resistance, the spacing shall not be less than 30 inches (762 mm) except that for piles having enlarged bases formed either by compacting concrete or driving a pre-cast base, the minimum center-to-center spacing shall be 4 1/2 feet (1,372 mm). The spacing of piles shall be such that the average load on the supporting strata will not exceed the safe load-bearing value of those strata as determined by test borings or other approved methods."

viii. In Section 1808.2.8.3.1, Load test evaluation, Item 4 shall be deleted in its entirety.

ix. In Section 1808.2.23.1, Seismic Design Category C, in the

exception, “subject to approval of the building official” shall be deleted.

[ix.] **x.** In Section [1807.2.23.2] **1808.2.23.2**, Seismic Design Category D, E, or F, the reference to “Seismic Design Categories E and F” shall be deleted. **In addition, in Exception 1, “or U” shall be deleted.**

[x.] **xi.** Section [1808.2.2.1] **1809.2.2.1**, Materials, shall be deleted in its entirety and Section 1821.2.2 of the 1996 BOCA National Building Code shall be inserted as follows: "All concrete shall have a 28-day specified compressive strength (f_c) of not less than 4,000 psi (27579 kPa)."

[17. Chapter 21, Masonry, shall be amended as follows:

i. In Figure 2111.1, Fireplace and Chimney Details, in the plan view illustration, Letter B is improperly dimensioned. The text of Section 2111.10 shall prevail.]

[18.] **19.** Chapter 23, Wood, shall be amended as follows:

[i. In Section 2303.4.1, entitled "Truss Design Drawings," the third sentence shall be amended to insert "and truss layout drawings" after "Truss shop drawings."]

i. In Section 2303.4.1.2, Truss design drawings, the last paragraph beginning with “Where required by one of the following” shall be deleted in its entirety.

ii. In Section 2303.4.1.3, Truss placement diagram, the exception shall be deleted in its entirety.

[ii.] **iii.** New Section [2303.4.2] **2303.4.1.8**, entitled "Truss

Identification," shall be inserted as follows: "Each truss shall be labeled or otherwise indelibly marked at the factory with the individual truss number as assigned in the truss layout plan. The indelible marking or label shall be located on the bottom chord of the truss, inside the bearing points. When indelible markings are used, each digit shall be not less than one inch high. When labels are used, the label shall be a minimum of five inches by three inches and shall be affixed to the truss by a truss plate. Labels shall remain affixed to the truss."

iv. In Table 2306.3.2, Allowable shear for wood structural panel blocked diaphragms utilizing multiple rows of fasteners with framing of Douglas fir-larch or southern pine for wind or seismic loading, Note g shall be deleted.

v. In Section 2308.1, General, the last sentence shall be deleted.

Renumber 19. as 20. (No change in text.)

[20.] **21.** Chapter 30, Elevators and Conveying Systems, shall be amended as follows:

i. In Section 3001.1, Scope, "and, where applicable, N.J.A.C. 5:23-12 **shall**" shall be inserted after "chapter." **In addition, "governs" shall be deleted and "govern" shall be inserted.**

ii. In Section 3001.2, Referenced standards, ["this code" shall be deleted and "these rules" shall be inserted. In the same section,] "with the exception of [Rule 1206.1h, Part XX and Part XXI]" **Sections 7.4 through 7.7, Sections 7.9 through 7.11, and Section 8.6.1.6.5,** shall be inserted after "ASME A17.1" and "ASME A18.1," shall be inserted after "ASME A90.1." [In addition, at the end of the section, the following

shall be inserted: "The scope of Part XXIV of ASME A17.1, entitled "Elevator Safety Requirements for Seismic Risk Zone 2 or Greater," is deleted."]

iii. In Section 3001.3, Accessibility, "Chapter 11" shall be deleted and "the barrier free subcode (N.J.A.C. 5:23-7)" shall be inserted.

Renumber iii. – v. as iv. – vi. (No change in text.)

[vi.] **vii.** In Section [3004.4 Closed vents] **3004.3, Area of vents, in the last sentence,** "annealed glass" shall be deleted and "plain glass" shall be inserted.

[vii.] **viii.** In Section [3004.5] **3004.4,** Plumbing and mechanical systems, in the exception, [shall be deleted] **"without an oil-water separator" shall be inserted at the end of the sentence. In addition, the following sentence shall be inserted: "The discharge shall not be directly or indirectly connected to the sanitary drainage system."**

[21.] **22.** Chapter 31, Special Construction, shall be amended as follows:

i. – ii. (No change.)

iii. In Section 3104.2, Separate structures, Exception 2 shall be deleted.

[iii.] Section 3109, Swimming Pool Enclosures, shall be deleted in its entirety and the following shall be inserted:

"3109

SWIMMING POOLS, SPAS AND HOT TUBS

3109.1 General. The provisions of this section shall control the design and construction of swimming pools, spas and hot tubs.

3109.2 Definitions. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

BARRIER.

A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB.

See "Swimming pool."

IN-GROUND POOL.

See "Swimming pool."

RESIDENTIAL.

That which is situated on the premises of a detached one-or two-family dwelling or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE.

See "Swimming pool."

SWIMMING POOL.

Any structure intended for swimming or recreational bathing that can hold water 24 inches (610 mm) or more in depth. This includes in-ground, aboveground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR.

A swimming pool that is totally contained within a structure and surrounded on all four sides by walls of said structure.

SWIMMING POOL, OUTDOOR.

Any swimming pool, which is not an indoor pool.

3109.3 In-ground public pools. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-1 as listed in Chapter 35.

3109.4 In-ground Residential pools. In-ground residential pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Chapter 35.

3109.5 Permanently installed public spas and hot tubs. Permanently installed public spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-2 as listed in Chapter 35.

3109.6 Portable residential spas and hot tubs. Portable residential spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Chapter 35.

3109.7 Enclosures for private swimming pools, spas and hot tubs. The provisions of this section shall control the design of barriers for residential swimming pools, spas and hot tubs.

3109.7.1 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1,219 mm) above grade measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the

barrier shall be two inches (51 mm) measured on the side of the barrier, which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be four inches (102 mm).

2. Openings in the barrier shall not allow passage of a four-inch-diameter (102 mm) sphere.

3. Solid barriers, which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1,143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1,143 mm) or more, spacing between vertical members shall not exceed four inches (102 mm). Where there are decorative cutouts within vertical members, spacing

within the cutouts shall not exceed 1.75 inches (44 mm) in width.

6. Maximum mesh size for chain link fences shall be a 1.25-inch (32 mm) square unless the fence is provided with slats fastened at the top or the bottom that reduce the openings to not more than 1.75 inches (44 mm).

7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).

8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1,372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:

8.1. The release mechanism shall be located on the pool side of the gate at least three inches (76 mm) below the top of the gate, and

8.2. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

9. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then:

9.1. The ladder or steps shall be surrounded by a barrier that meets the requirements of Section AG105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a four-inch-diameter (102 mm) sphere.

3109.8 Barrier exceptions. Spas or hot tubs with a safety cover that complies with ASTM F 1346, as listed in Chapter 35, shall be exempt from the provisions of this section.

3109.9 Enclosures for public swimming pools, spas and hot tubs. Public swimming pools shall be completely enclosed by a fence at least four feet (1,290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a four-inch (102 mm) diameter sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates."]

iv. In Section 3109.4.1.8, Dwelling wall as barrier, Item 3 shall be deleted in its entirety.

v. In Section 3109.4.1.9, Pool structure as barrier, “either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps” shall be deleted. In addition, the last sentence shall be deleted.

vi. Section 3109.5, Entrapment avoidance, shall be deleted in its entirety.

vii. Add new Section 3110.0, “Swimming pools and spas” as follows:

3110.0 Swimming pools and spas. Swimming pools and spas shall be constructed in accordance with section 3110.1 through 3110.

3110.1 Public swimming pools. Public swimming pools shall be designed and constructed in conformance with ANSI/NSPI-1 as listed in Chapter 35.

3110.2 Public spas. Public spa shall be designed and constructed in conformance with ANSI/NSPI-2 as listed in Chapter 35.

3110.3 Permanently installed residential spas. Permanently installed residential spas shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Chapter 35.

3110.4 Above-ground and on-ground residential swimming pools. Above-ground and on-ground residential swimming pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Chapter 35.

3110.5 Residential in-ground swimming pools. Residential in-ground swimming pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Chapter 35.

3110.6 Portable spas. Portable spas shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Chapter 35.

Renumber 22. as 23. (No change in text.)

[22.] 24. Chapter 33, Safeguards During Construction, shall be amended as follows:

i. (No change.)

ii. In Section 3306.2, Walkways, “Chapter 11” shall be deleted and “the barrier free subcode, N.J.A.C. 5:23-7” shall be inserted.

Renumber ii. as iii. (No change in text.)

Renumber 24. as 25. (No change in text.)

[25.] **26.** Chapter 35, Referenced Standards, shall be amended as follows:

[i. Under the subheading "ASME," the following reference shall be inserted: "ASME A18.1-1999, Safety Standard for Platform Lifts and Stairway Chairlifts, with A18.1a-2001 addenda."

ii. Under the subheading "NFPA," "NFPA 13-96, Installation of Sprinkler Systems; NFPA 13D-96, Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes; and NFPA 13R-96, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height" shall be deleted and "NFPA 13-99 Installation of Sprinkler Systems; NFPA 13D-99, Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes; and NFPA 13R-99, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height" shall be inserted. In addition, "NFPA 20-99, Installation of Centrifugal Fire Pumps" shall be inserted after "NFPA 17A-98, Wet Chemical Extinguishing Systems."

[iii.] **i.** [Under the] **New** subheading "NSPI" **shall be inserted as follows:**

“NSPI – National Spa and Pool Institute, 2111 Eisenhower Avenue, Alexandria, VA 22314. In addition, the following NSPI Standards shall be inserted: "ANSI/NSPI-1-**03**, [Permanently Installed Public In-ground] Public **Swimming** Pools, ANSI/NSPI-2-**99**, [Permanently Installed] Public Spas, ANSI/NSPI-3-**99**, Standard for Permanently Installed Residential Spas, ANSI/NSPI-4-**99**, Standard for [Residential] Above-Ground/[One] **On**-Ground **Residential** Swimming Pools, [and] ANSI/NSPI-5-**03**,

Standard for Residential In-ground Swimming Pools[.]”, and ANSI/NSPI-6-99, Standard for Portable Spas.”

ii. Under the subheading “ACI 318-05,” “Section 1708.3” shall be deleted.

iii. Under the subheading “ACI 530-05,” “Section 1708.1.1,” “Section 1708.1.2,” and “Section 1708.1.3” shall be deleted.

iv. Under the subheading “AISC 341-05,” “Section 1708.4” shall be deleted.

v. Under the subheading “ASCE/SEI 5-05,” “Section 1708.1.1,” “Section 1708.1.2” and “Section 1708.1.3” shall be deleted.

vi. Under the subheading “ASTM A615/A A615M-04a,” “Section 1708.3” shall be deleted.

vii. Under the subheading “ASTM A898/A 898M –91(2001),” “Section 1708.3” shall be deleted.

viii. Under the subheading “AWS D1.1-04,” “Section 1708.4” shall be deleted.

ix. Under the subheading “TMS 402-05,” “Section 1708.1.1,” “Section 1708.1.2” and “Section 1708.1.3” shall be deleted.

[26.] 27. The Appendices shall be amended as follows:

i. – ii. (No change.)

iii. Appendix I, Patio Covers, and Appendix J, [Supplementary

Accessibility Requirements for Qualified Historic Buildings and Facilities] **Grading**, **Appendix K, ICC Electrical Code**, shall be deleted in their entirety.

5:23-3.15 Plumbing subcode

(a) Rules concerning subcode adopted are as follows:

1. Pursuant to authority of P.L. 1975, c.217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the Model Code of the National Association of Plumbing Heating-Cooling Contractors, known as "The National [Standards] **Standard** Plumbing Code/[2003]**2006**," as the plumbing subcode for New Jersey.

i. (No change.)

2. "The National Standard Plumbing Code/[2003]**2006**," including appendices, may be known and cited as "the plumbing subcode."

(b) The following pages, chapters, sections or appendices of the plumbing subcode [are] **shall be** amended as follows:

1. – 2. (No change.)

3. Chapter 2 of the plumbing subcode, entitled "General Regulations," [is] **shall be** amended as follows:

i. – ii. (No change)

iii. In Section 2.11, Piping materials exposed within plenums, “Codes” shall be deleted and “subcodes” shall be inserted.

[iii.] **iv. In** Section 2.12 [is amended to delete], **Sleeves**, subparagraph e., **“regulations” shall be deleted and “subcode” shall be inserted.**

[iv.] **v.** In Section 2.16, **Freezing or overheating**, at item 1, [insert the number] “42” **shall be inserted** in the blank space provided. Additionally, [add] the following sentence **shall be inserted**: “Combination domestic/fire water service piping shall be installed such that the minimum earth cover is 42 inches or the top of the pipe is 12 inches bellow the frost depth of the locality, whichever is greater. Limited-area sprinkler systems installed in accordance with Section 903.3.5.1.1 of the building Subcode, shall be installed such that the minimum earth cover is 42 inches.” In the same section, at Item 2, [insert the number] “24” **shall be inserted** in the blank space provided [and add the following sentence at the end: “Minimum earth cover for building sewers connected to a private sewage disposal system shall be 6 inches.”]. **In addition, in the second line of Item 2, “6” shall be inserted in the blank space provided.**

Renumber v. – vii. as vi. – viii. (No change in text.)

4. Chapter 3 of the plumbing subcode, entitled "Materials," [is] **shall be** amended as follows:

i. – ii. (No change.)

iii. In Section [3.13] **3.1.3, Standards applicable to plumbing materials**, [delete] "Section 3.12.2" **shall be deleted** and [insert] "N.J.A.C. 5:23-3.7[.]" **shall be inserted.**

iv. – viii. (No change.)

ix. [Sections 3.12.1, 3.12.2, 3.12.3, 3.12.4, and 3.12.5 are] **Section 3.12, Alternate materials and methods, shall be** deleted in [their] **its** entirety.

5. (No change.)

6. Chapter 5 of the plumbing subcode entitled, "Traps, Cleanouts and Backwater Valves," [is] **shall be** amended as follows:

i. In Section 5.3.2, **Trap seals, in** Exception (2), [delete "administrative authority" and insert "Authority Having Jurisdiction] **“in accordance with N.J.A.C. 5:23-3.3[.]” shall be inserted after “Authority Having Jurisdiction.”**

ii. In Section 5.3.4 [delete "administrative authority" and], **Building traps,** [insert "Authority Having Jurisdiction] **“in accordance with N.J.A.C. 5:23-3.3[.]” shall be inserted after “Authority Having Jurisdiction.”**

7. Chapter 6 of the plumbing subcode, entitled "Liquid Waste Treatment Equipment," [is] **shall be** amended as follows:

i. At the end of Section 6.1.1 [delete "in the opinion of the administrative authority" and], **Where required,** [add] the following **shall be inserted:** "The determination of necessity shall be made by the plumbing subcode official in accordance with N.J.A.C. 5:23-3.3."

ii. (No change.)

8. Chapter 7 of the plumbing subcode, entitled "Plumbing Fixtures, Fixture Fittings and Plumbing Appliances," [is] **shall be** amended as follows:

i. (No change.)

ii. In Section 7.4.4, **Bowl height,** Exception (2) **and Exception (3)** shall be deleted and the following text shall be inserted: "Accessible water closets shall conform to the requirements of N.J.A.C. 5:23-7 et seq. [In facilities intended primarily for use by the elderly, water closets, other than those required to be accessible, shall be at least 17 inches high.]"

iii. – v. (No change.)

vi. [A new section 7.25 is added as follows:] **Section 7.23, Safety**

features for spas and hot tubs, shall be deleted and Section 7.23, Safety features for swimming pools, spas and hot tubs, shall be inserted as follows:

"[7.25] **7.23** Safety Features for [Public] Swimming Pools, **spas and hot tubs**."

[Public swimming pools shall comply with the following sections of the N.J.

Department of Health and Senior Services, Chapter 26 "Public Recreational Bathing,"

Subchapter 3.

Swimming Pools. N.J.A.C. 8:26-3.16 Inlets and outlets:]

7.23.1 General. Suction outlets shall be designed to provide circulation throughout the pool, spa or hot tub. Single-outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise, shall be protected against user entrapment.

7.23.2 Suction fittings. All pool and spa suction outlets shall have a cover that conforms to ASME A112.19.8M, a 12-inch by 12-inch (305 mm by 305 mm) drain grate or larger, or an approved channel drain system.

Exception: Surface skimmers.

7.23.3 Atmospheric vacuum relief system required. Pool and spa single- or multiple-outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. This vacuum relief system shall include at least one approved or engineered method of the type specified herein, as follows:

1. Safety vacuum release system conforming to ASME A112.19.17; or

2. Approved gravity drainage system

7.23.4 Dual drain separation. Single- or multiple-pump circulation systems shall have a minimum of two suction outlets of the approved type. A minimum horizontal or vertical distance of 3 feet (914 mm) shall separate such outlets. The suction outlets shall be piped so that water is drawn through the outlets simultaneously through a vacuum-relief-protected line to the pump or pumps.

[(c)1.] **7.23.4.1** All swimming pools shall be equipped with main drain suction outlets in the lowest point of the swimming pool floor. The spacing of the main drain suction outlets shall not be greater than 20 feet on center, nor more than 15 feet from each side wall.

[(d) The suction outlets shall be designed to protect against a suction entrapment, evisceration, and/or hair entanglement/entrapment hazard.

2. A minimum of two hydraulically balanced suction outlets equipped with covers shall be provided per swimming pool pump suction line.

ii. No means of isolating the two suction outlets shall be permitted that will cause one suction fitting to become the sole source of fluid to the pump. The single pipe to a pump suction inlet may be valved off to shut off the flow to the pump."]

7.23.5 Pool cleaner fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least 6 inches (152 mm) and not more than 12 inches (305 mm) below the minimum operational water level or as an attachment to the skimmer(s).

9. Chapter 8 of the plumbing subcode, entitled "Hangers and Supports," shall be amended as follows:

i. In Section 8.9, Seismic supports for piping, “code” shall be deleted and “subcode” shall be inserted.

[9.] **10.** Chapter 10 of the plumbing subcode, entitled "Water Supply and Distribution," [is] **shall be** amended as follows:

i. – iii. (No change.)

iv. In Section 10.4.4 [delete "administrative authority" and], **Private supplies, at Note b,** [insert "Authority Having Jurisdiction] **“in accordance with N.J.A.C. 7:10-10.2(e)[.]” shall be inserted after “Authority Having Jurisdiction.”**

v. – vi. (No change.)

vii. Section 10.15.1, **Hot water supply system,** [is] **shall be** amended to add the phrase "Outlet temperature of hot water from lavatory faucets in public facility restrooms (such as those in service stations, airports, train and bus terminals, and conventions halls) shall be provided with a means to limit the maximum temperature to 110 [[degree]] **degrees** F. as required in ASHRAE 90.1-1999."

Renumber 10. as 11. (No change in text.)

[11.] **12.** Chapter 12 of the plumbing subcode, entitled "Vents and Venting," [is] **shall be** amended as follows:

[i. In Section 12.4.5 delete "when approved by the Authority Having Jurisdiction".]

Renumber ii. – iii. as i. – ii. (No change in text.)

[12.] **13.** Chapter 13 of the plumbing subcode, entitled "Storm Water Drainage," [is] **shall be** amended as follows:

i. **In** Section 13.1.5, **Foundation drains, Notes** a. through c. [is] **shall be** amended to read "subsoil drains shall be provided in accordance with the building subcode."

ii. Section 13.1.10.1, **Primary roof drainage**, [is] **shall be** amended to delete the last sentence and to substitute in lieu thereof "Rainfall rates shall be [based on Appendix A of the 1993 edition of the National Standard Plumbing Code. Appendix A shall be] applied so that the applicable rainfall rate for Burlington and Ocean counties and all counties south shall be six inches per hour and for Mercer and Monmouth counties and all counties north, the applicable rainfall rate shall be five inches per hour."

iii. – v. (No change.)

[13. Except as otherwise indicated in (b) 14i below, sections 16.1 through 16.12.1.13 of chapter 16 of the plumbing subcode, entitled "Regulations Governing Individual Sewage Disposal Systems for Homes and Other Establishments Where Public Sewer Systems Are Not Available" are deleted in their entirety.

i. Section 16.1.7 is retained and amended to read as follows: "When a sewage disposal system is being abandoned and a connection is being made to the public sewer system, the plumbing subcode official shall ensure that the abandoned septic system is disconnected from the building, pumped out and filled with gravel, stones or soil material."

Note: Existing standards of the Department of Environmental Protection and boards of health with respect to individual on-site sewage disposal systems remain in effect.]

14. (No change.)

15. Chapter 16 of the plumbing subcode, entitled “Regulations Governing Individual Sewage Disposal Systems for Homes and Other Establishments Where Public Sewer Systems Are Not Available,” shall be amended as follows:

i. Except as otherwise indicated in (b)15ii. below, Sections 16.1 through 16.12.1.13 shall be deleted in their entirety.

ii. Section 16.1.7, Abandoned disposal systems, shall be retained and amended to read as follows: "When an existing sewage disposal system is being abandoned and a connection is being made to the public sewer system or new sewage disposal system, the plumbing subcode official shall ensure that the existing abandoned tank is disconnected from the building, pumped out and filled with gravel, stones or soil material."

Note: Existing standards of the Department of Environmental Protection and boards of health with respect to individual on-site sewage disposal systems remain in effect.

[15.] **16.** Chapter 17 of the plumbing subcode entitled, “Potable Water Supply Systems,” [and comprising sections 17.1 through 17.15.2 is] **shall be** deleted in its entirety.

Note: Existing standards of the Department of Environmental Protection and boards of health with respect to individual on-site water supply systems remain in effect.

[16.] **17.** Chapter 18 of the plumbing subcode, entitled "Mobile Home and Travel Trailer Park Plumbing Standards," [is] **shall be** amended as follows:

i. **In** Section 18.2.1, **General**, [is amended to delete] the last sentence beginning **with** "Trailer home park" **shall be deleted**.

ii. – viii. (No change.)

[17.] **18.** Appendix A, entitled "Sizing Storm Drainage Systems," [is] **shall be** deleted in its entirety.

19. Appendix F, entitled "Requirements of the Authority Having Jurisdiction," shall be amended as follows.

i. In Section F.2, References, the following shall be deleted: "1.7.2 Penalties; 1.9.8 Permit Expiration; 1.10.2 Plan Review Fees; 1.10.3 Plan Review Expiration; 1.10.5 Refunding of Fees; and 1.11.5 Requests for Inspection."

5:23-3.17 Fire protection subcode

(a) Rules concerning the subcode adopted are as follows:

1. Pursuant to the authority of P.L. 1975, c.217 as modified by P.L. 1996, c.53, the Commissioner hereby adopts the following portions of the building, electrical, mechanical and fuel gas subcodes, to the extent delineated in N.J.A.C. 5:23-3.4, as the fire protection subcode for New Jersey.

i. International Building Code/[2000]**2006** of the International Code Council, Inc. (N.J.A.C. 5:23-3.14):

(1) Chapter 3-Use and Occupancy Classification;

(2) Chapter 4-Special Detailed Requirements Based on Use and Occupancy;

(3) Chapter 7-Fire Resistance-Rated Construction;

(4) Chapter 8-Interior Finishes;

(5) Chapter 9-Fire Protection Systems and N.J.A.C 5:23-3.5(d) entitled "Posted Hydraulic System Data Plate";

[(A) Section 907.2.6 shall be amended as follows: Add the following text to the end of this section: "Alarms activated by smoke detectors required by this section shall be activated by either two cross-zoned smoke detectors with a single protected area or a single smoke detector monitored by an alarm verification zone or an approved equivalent method."

(B) Section 907.2.8 shall be amended as follows: Add the following text to the end of this section: "Alarms activated by smoke detectors required by this section shall be activated by either two cross-zoned smoke detectors with a single protected area or a single smoke detector monitored by an alarm verification zone or an approved equivalent method."]

(6) Chapter 10-Means of Egress;

(7) Sections 2111 through 2113 of Chapter 21-Masonry;

(8) Sections 2603 through 2607 of Chapter 26-Plastic;

(9) Section 3104 of Chapter 31-Special Construction;

(10) Section 3309, 3311 and 3312 of Chapter 33-Safeguards During Construction;

ii. National Electrical Code/[2002]2005 of the National Fire Protection Association (N.J.A.C. 5:23-3.16).

(1) Section 300.21 of Chapter 3-Wiring Methods and Materials;

(2) Article 450, Part III-Transformer Vaults of Chapter 4-Equipment for General Use;

(3) Chapter 5-Special Occupancies;

(4) Article 695-Fire Pumps of Chapter 6-Special Equipment;

(5) Article 760-Fire Alarm Systems of Chapter 7-Special Conditions;

iii. International Mechanical Code/[2003]2006 of the International Code Council (N.J.A.C. 5:23-3.20):

(1) Chapter 3-General Regulations;

(2) Chapter 5-Exhaust Systems;

(3) Chapter 6-Duct Systems;

(4) Chapter 7-Combustion Air;

(5) Chapter 8-Chimneys and Vents;

(6) Chapter 9-Specific Appliances, Fireplaces and Solid Fuel Burning Equipment;

(7) Chapter 13-Fuel Oil Piping and Storage;

iv. International Fuel Gas Code/[2003]2006 of the International Code Council (N.J.A.C. 5:23-3.22):

(1) Chapter 3-General Regulations;

(2) Chapter 5-Chimneys and Vans;

(3) Chapter 6-Specific Appliances.

2. The model code portions listed above may be known as "the fire protection subcode."

(b) Rules concerning modifications to subcodes are as follows:

1. The modifications made to the appropriate portion of the adopted model code in N.J.A.C. 5:23-3.14 (Building Subcode), N.J.A.C. 5:23-3.16 (Electrical Subcode), N.J.A.C. 5:23-3.20 (Mechanical Subcode) and N.J.A.C. 5:23-3.22 (Fuel Gas Subcode) will apply also to those portions as regards this adoption.

5:23-3.18 Energy Subcode

(a) Rules concerning the subcode adopted are as follows:

1. Pursuant to authority of P.L. 1975, c.217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the model code of the [Council of American Building Officials, Inc., known as the Model Energy Code/1995] **International Code Council, known as the International Energy Conservation Code (IECC/2006)**, as the energy subcode for New Jersey.

i. Copies of the [CABO Model Energy Code/1995] **IECC/2006** may be obtained from [BOCA International] **International Code Council**, 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795.

ii. The model code listed above may be known and cited as the "energy subcode."

(b) The following chapters and sections of the energy subcode are amended as follows:

[1. The following amendments are made to Chapter 1 of the energy subcode titled "Administration and Enforcement":

i. Section 101.1 "Title" is deleted.

ii. Section 101.3 "Compliance" is amended to add the following sentence after the first bullet item: "Residential buildings provided with high efficiency equipment (90

percent AFUE for furnace 85 percent AFUE for boilers and 8.0 HSPF for air source heat pumps) shall be exempt from the requirement to insulate basement walls. Code requirements for other envelope components must meet the component performance approach requirements of Chapter 5."

iii. Subsection 101.4.3 "Application to existing buildings" is deleted.

iv. Subsections 102.1.2 and 102.1.3 are deleted.

v. Section 102.2 "Maintenance information" is deleted.

vi. Section 104 "Plans and specifications" is deleted.

vii. Section 105 "Inspection" is deleted.

viii. Section 106 "Validity" is deleted.

2. The following amendments are made to Chapter 2 of the energy subcode titled "definitions":

i. The term "building official" is deleted, and the following language is substituted: "For the purpose of the energy subcode, the term "building official" shall mean the appropriate subcode official as designated in N.J.A.C. 5:23-3.4."

ii. The term "building project" is deleted.

3. The following amendments are made to Chapter 3 of the energy subcode, titled "Design Conditions":

i. Section 302.1 is amended to read as follows: "Design conditions shall be based on the values from the 97 1/2 percent column for winter and the 2 1/2 percent column for summer from climate tables in Standard RS-1 listed in Chapter 8 for the nearest listed location."

ii. Table 302.1 is deleted.

4. The following amendments are made to Chapter 5 of the energy subcode titled
 "Residential Building Design by Component Performance Approach":

i. Table 502.2.1a is amended as follows:

Table 502.2.1a

Heating and Cooling Criteria

Heating degree days/county	Element	Mode	Type A1 Buildings Uo	Type A2 Buildings Uo
4,500	Walls	Heating or Cooling	.150	.215
Atlantic, Camden,	Roof/Ceiling	Heating or Cooling	.033	.033
Cape May, Cumberland, Gloucester, Salem	Floors over unheated space	Heating or Cooling	.05	.05
	Unheated/heat ed slab on grade	Heating	R value-4/R-6	R value-4/R-6
	Basement Wall	Heating or Cooling	.1	.1
	see notes 2, 3, 4			
	Crawl Space Wall	Heating or Cooling	.075	.075
5,000	see notes 2, 3 Walls	Heating or Cooling	.141	.215
Burlington, Essex,	Roof/Ceiling	Heating or Cooling	.031	.031
Hudson, Mercer, Middlesex, Monmouth, Ocean, Union	Floors over unheated space	Heating or Cooling	.050	.0500
	Unheated/heat ed slabs on grade	Heating	R value-4 .3/6.4	R value-4 .3/6.4
	Basement Wall	Heating or Cooling	.1	.1
	see notes 2, 3, 4			
	Crawl Space Wall	Heating or Cooling	.060	.060

5,500	see notes 2, 3 Walls	Heating or Cooling	.134	.215
Bergen, Hunterdon, Morris, Passaic, Somerset Sussex, Warren	Roof/Ceiling	Heating or Cooling	.028	.028
	Floors over unheated space	Heating or Cooling	.050	.050
	Unheated/heated slabs on grade	Heating	R-4.7/6.7	R-4.7/6.7
	Basement Wall	Heating or Cooling	.0975	.0975
	see notes 2, 3, 4			
	Crawl Space Wall	Heating or Cooling	.060	.060
	see notes 2, 3			

1. Values were determined using the graphs (Figures 1, 2, 3, 4, 5 and 6) contained in Chapter 8.

2. Basement and crawl space wall U-values shall be based on the wall components and surface air film. Adjacent soil shall not be considered in the determination of the U-value.

3. Typical foundation wall techniques can be found in standard RS-20 found in Chapter 8.

4. The need for basement wall insulation shall be waived when the residential building is provided with high efficiency mechanical equipment (furnaces 90 percent AFUE or greater, boilers 85 percent AFUE or greater).

5. The following amendments are made to Chapter 7 of the energy subcode titled "Building Design for all Buildings Other than Residential Buildings":

i. Section 702.1 is amended to read "building designs shall meet the requirements of Sections 5.2, 6.2, 7.2, 9.2 and 10.2 in Standard RS-22 listed in Chapter 8."

ii. Section 702.2 is amended to read:

"In addition, building designs shall meet the prescriptive criteria of Sections 5.3, 6.3, 7.3 and 9.3."

The exception is amended to read:

"1. The system performance requirements of Standard RS-22 may be used in the following cases:

1.1 A building design meeting Section 6.1.3 instead of the Section 6.2 and 6.3 prescriptive requirements in Standard RS-22.

1.2 A building meeting Section 5.4 instead of the 5.3 prescriptive requirements in Standard RS-22.

2. A building design meeting the Section 11 building energy cost budget method in Standard RS-22."

6. Chapter 8 titled "Referenced Standards" is amended as follows:

i. RS-22 is amended to read "ASHRAE/IES 90.1--1999 Energy Efficient Design of New Buildings Except Low Rise Residential Buildings (c)2000."]

1. Chapter 1, Administration, shall be amended as follows:

i. Section 101.1, Title, shall be deleted.

ii. Section 101.4.1, Existing buildings; Section 101.4.2, Historic buildings; Section 101.4.3, Additions, alterations, renovations or repairs; and Section 101.4.4, Change in Occupancy, shall be deleted.

iii. New Section 101.5.3, Residential high-efficiency mechanical tradeoff, shall be inserted as follows: "Residential buildings provided with high efficiency equipment (90 percent AFUE for furnace 85 percent AFUE for boilers and 8.0 HSPF for air source heat pumps) throughout shall be exempt from the requirement to insulate basement walls. Code requirements for other envelope components must meet the component performance approach requirements of

Chapter 4."

iv. Section 102.3, Maintenance information, shall be deleted.

v. Sections 104, Construction Documents, 105, Inspections, and 106, Validity, shall be deleted.

2. Chapter 2, Definitions, shall be amended as follows:

i. The definitions "Addition", "Building", "Code Official", and "Dwelling Unit" shall be deleted.

ii. The definition of "Residential Building" shall be deleted and the following definition shall be inserted: "Detached one- and two-family dwellings and all other residential buildings three stories or less in height, except buildings of Group R-1."

3. Chapter 3, Climate Zones, shall be amended as follows:

i. All Sections, Figures and Tables shall be deleted and the following shall be inserted in their place:

"301.1 General. Climate Zones, in heating degree days (HDD), from Table 301.1 shall be used in determining the applicable requirements of Chapter 4."

Table 301.1	
Climate Zone (HDD)	County
4500 - 4999	Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Salem
5000 - 5499	Essex, Hudson, Mercer, Middlesex, Monmouth, Ocean, Union
5500 - 5999	Bergen, Hunterdon, Morris, Passaic, Somerset
6000 - 6499	Sussex, Warren

4. Chapter 4, Residential Energy Efficiency, shall be amended as follows:

i. Section 401.3, Certificate, shall be deleted.

ii. In Section 402.1.1, Insulation and fenestration criteria, "Table

402.1.1” shall be deleted and “Table 402.1.3” shall be inserted.

iii. Table 402.1.1 shall be deleted and any references made to it shall become references to Table 402.1.3.

iv. Section 402.1.2, R-value computation, shall be deleted.

v. Section 402.1.3, U-factor alternative, shall be deleted.

vi. Table 402.1.3 shall be deleted and the following table shall be inserted:

Table 402.1.3 – Assembly Thermal Transmittance Value (U-factor)								
Detached One- and Two-Family Dwellings								
Climate Zone (HDD)	Wall factor ¹	U-Ceiling factor ¹	U-Slab U-factor ²		Floor factor	U-Crawl Space Wall factor	Basement Wall U-factor ^{1, 3}	U-
			Unheated	Heated				
4500-4999	0.142	0.031	0.235	0.158	0.049	0.066	0.097	
5000-5499	0.134	0.029	0.218	0.149	0.049	0.059	0.096	
5500-5999	0.127	0.027	0.203	0.141	0.049	0.059	0.095	
6000-6499	0.119	0.025	0.190	0.134	0.049	0.059	0.094	
All other residential buildings three stories or less in height, except buildings of Group R 1								
Climate Zone (HDD)	Wall factor ¹	U-Ceiling factor ¹	U-Slab U-factor ²		Floor factor	U-Crawl Space Wall factor	Basement Wall U-factor ^{1, 3}	U-
			Unheated	Heated				
4500-4999	0.211	0.031	0.235	0.158	0.049	0.066	0.097	
5000-5499	0.211	0.029	0.218	0.149	0.049	0.059	0.096	
5500-5999	0.211	0.027	0.203	0.141	0.049	0.059	0.095	
6000-6499	0.203	0.025	0.190	0.134	0.049	0.059	0.094	
Notes:								
1. Assembly includes fenestration.								

2. Slab insulation depth is 2 feet, except that for 6000-6499 HDD, insulation depth is 4 feet.
3. The need for basement wall insulation shall be waived when the requirements of Section 101.5.3 are met.

vii. In Section 402.1.4, Total UA alternative, “alternative” shall be deleted from the title. In addition, in the first sentence, “with Table 402.1.1” shall be deleted.

viii. In Section 402.2.3, Mass walls, the exception shall be deleted.

ix. In Section 402.2.7, Slab-on-grade floors, the reference to “Table 402.1.1” in the first and third sentence shall be deleted and “Table 402.1.3” shall be inserted.

x. In Section 402.2.10, Thermally isolated sunroom insulation, “zones 1 through 4” shall be deleted and “HDD 4500-5499” shall be inserted. In addition, “zones 5 through 8” shall be deleted and “HDD 5500-6499” shall be inserted.

xi. In Section 402.3.5, Thermally isolated sunroom U-factor, “For Zone 4 through 8, the” shall be deleted and “The” shall be inserted.

xii. Section 402.3.6, Replacement fenestration, shall be deleted.

xiii. In Section 402.4.3, Recessed lighting, in Item #3 “and labeled for” shall be inserted after “inside.”

xiv. In Section 402.5, Moisture control (Mandatory), Exception 2, “Zones 1 through 4” shall be deleted and “HDD 4500-5499” shall be inserted.

xv. Section 402.6, Maximum fenestration U-factor and SHGC (Mandatory), shall be deleted.

5. Chapter 5, Commercial Energy Efficiency, shall be amended as follows:

i. All Sections and Tables shall be deleted and the following shall be inserted:

“501.1 Scope. Commercial buildings shall meet the requirements of ASHRAE/IESNA Standard 90.1-2004 (ASHRAE/2004), Energy Standard for Buildings Except for Low-Rise Residential Buildings.

501.2 Amendments. The following amendments shall apply to ASHRAE/2004:

1. Section 9.4.1.4 (c), shall have the following sentence added: “Guest suites shall have the option of a master control device meeting these requirements at the entry to each room.”

2. Chapter 8, Power, shall be considered optional.

3. Table B-1, US Climate Zones, shall be amended so that New Jersey is Zone 4A, except that Bergen, Hunterdon, Morris, Passaic, Somerset, Sussex and Warren Counties shall be Zone 5A.”

5:23-3.20 Mechanical subcode

(a) Rules concerning the subcode adopted are as follows:

1. Pursuant to authority of P.L. 1975, c.217, the Commissioner hereby adopts the model code of the International Code Council, Inc., known as the International Mechanical Code/[2003] **2006**. This code is hereby adopted by reference as the Mechanical Subcode for the State of New Jersey subject to the modifications in (b) below.

i. Copies of this code may be obtained from the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795.

ii. The International Mechanical Code/[2003] **2006** may be known and cited as the "mechanical subcode."

2. – 3. (No change.)

(b) The following chapters, sections or pages of the International Mechanical Code/[2003 are] **2006 shall be** amended as follows:

1. - 2. (No change.)

3. Chapter 3 of the mechanical subcode, entitled "General Regulations," [is] **shall be** amended as follows:

i. – iii. (No change.)

[iv. In Section 305.5 delete 1.5 on line 4 and insert 1.0.]

[v] **iv. Section 307.1, Fuel-burning appliances, [is] shall be** amended to [delete "approved plumbing fixture" on line 3 and] insert [the following:] "drywell, sump pump, floor drain, or drainage system below floor" **after "fixture."**

Renumber vi. – ix. as v. – viii. (No change in text.)

[4. Chapter 4 of the mechanical subcode, entitled "Ventilation," is amended as follows:

i. Section 403.2 is amended to add the following language: "Exception: Where the registered design professional demonstrates that an engineered ventilation system design will prevent the maximum concentration of contaminants from exceeding

that obtainable by the rate of outdoor air ventilation determined in accordance with Section 403.3, the minimum required rate of outside air shall be reduced in accordance with such engineered system design."]

[5.] **4.** Chapter 5 of the mechanical subcode, entitled "Exhaust Systems," [is] **shall be** amended as follows:

i. – ii. (No change.)

iii. **In Section 513.11, Power systems,** [is amended to replace the third sentence with the following: "Secondary power shall be from a legally required standby power source complying with the electrical subcode." Also, delete the following sentences: "Power distribution from the two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power."] **in the third and seventh sentences, "ICC Electrical Code" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.**

iv. (No change.)

Re-number 6. as 5. (No change in text.)

6. Chapter 8 of the mechanical subcode, entitled "Chimneys and Vents," shall be amended as follows:

i. In Section 801.18.2, Flue passageways, in the first sentence, "free of obstructions and combustible deposits" shall be deleted and "inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d)" shall be inserted.

[7. Chapter 9 of the mechanical subcode, entitled "Specific Appliances, Fireplaces and Solid Fuel Burning Equipment," is amended as follows:

- i. Section 917.2 is deleted in its entirety.
- ii. Section 917.3 is deleted in its entirety.]

[8.] **7.** Chapter 10 of the mechanical subcode, entitled "Boilers, Water Heaters and Pressure Vessels," [is] **shall be** amended as follows:

- i. (No change.)
- ii. Section 1003.1, **General**, [is] **shall be** amended to add the following [phase] **phrase**: "Pressure vessels shall be designed and constructed in accordance with the requirements of ASME "Rules for Construction of Pressure Vessels, Section VIII/[1998]**2004**".

Renumber 9. – 10. as 8. – 9. (No change in text.)

[11.] **10.** Chapter 15 of the mechanical subcode, entitled "Referenced Standards," [is] **shall be** amended as follows:

- i. Under the heading "ICC," amend the following titles:
 - [(1) Delete "IBC--03, International Building Code" and insert "IBC--00, International Building Code."]
 - [(2)]**(1)** Delete "ICC EC—[03]**06**, ICC Electrical Code."
 - [(3)]**(2)** Delete "IEBC—[03]**06**, International Existing Building Code."

[(4)]**(3)** Delete "IECC—[03]**06**, International Energy Conservation Code."

[(5) Delete "IFC--03, International Fire Code" and insert "IFC--00, International Fire Code."]

[(6)]**(4)** Delete "IPC—[03]**06**, International Plumbing Code."

[(7) Delete "IRC--03, International Residential Code" and insert "IRC--00, International Residential Code."]

Renumber 12. – 13. as 11. -12. (No change in text.)

(c) (No change.)

5:23-3.21 One-and two-family dwelling subcode

(a) Rules concerning the subcode are adopted as follows:

1. Pursuant to authority of P.L. 1975, c.217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the model code of the International Code Council, **2006** International Residential Code known as the ["IRC/2000"] **"IRC/2006"** as the one-and two-family dwelling subcode in New Jersey subject to the modifications stated in (c) below.

i. Copies of this code may be obtained from the International Code Council at 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795.

ii. The [IRC/2000] **IRC/2006** may be known and cited as the one-and two-family dwelling subcode.

(b) The provisions of this subcode shall apply to the construction, alteration, repair, or increase in size of detached one-or two-family dwellings, or single family townhouses, of Group R-5 not more than three stories in height. For this purpose, a townhouse shall be as defined in Section 202 of the International Residential Code: "A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with open space on at least two sides."

(c) The following chapters or sections of the [IRC/2000] **IRC/2006** shall be modified as follows:

1. (No change.)

2. Chapter 2, Definitions, shall be amended as follows:

i. – xvi. (No change.)

xvii. The definition of “Structure” shall be deleted.

3. Chapter 3, Building Planning, shall be amended as follows:

i. (No change.)

[ii. In Section R301.2.1.1, Design criteria, "with the provisions of this code or" shall be inserted after "accordance." In addition, Item 2 shall be deleted.]

[iii.] **ii.** In Section R301.2.1.2, [Internal pressure]**Protection of openings,**
in the first sentence, “and glass doors” shall be inserted after “Windows.” In
addition, in the exception, "in one-and two-story buildings" shall be deleted from the first sentence.

[iv.] **iii.** Table R301.2(1), Climatic and Geographic Design Criteria, shall be amended as follows:

Table No. 301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Ground Snow Load (lbs./sq. ft)	Wind Speed (mph)	Seismic Design Category	Subject to Damage from Weathering	Frost Line Depth	Subject to Damage	
20	See fig. R301.2(4)	N/A	Severe	2 feet-6 inches	Termite Modera to	[Decay Slight
See note 4			See note 1	(Southern Area) 3 feet-0 inches (Northern Area) See notes 2, 3 and 4	to Heavy	to Moderate

Notes:

1. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy structural requirements of this code. The grade of masonry units shall be determined from the ASTM C34, C55, C62, C73, C90, C129, C145, C216, or C625 listed in Chapter 43.
2. The frost line depth may require deeper footings than indicated in Section R403.1.4. The jurisdiction shall fill in the frost line depth column with minimum depth of footing below finished grade.
3. New Jersey is divided into two zones: Zone 1 consists of Monmouth and Burlington Counties and all counties to the south. Zone 2 consists of Mercer and Middlesex Counties and all counties to the north.
4. The enforcing agency having jurisdiction may establish values other than the ones listed for “ground snow load,” and “frost line depth” if warranted by documented local climatic and geographic conditions.”

[v.] **iv.** [In] Section R301.2.2, Seismic provisions, ["and single-family townhouses" shall be inserted after "Detached one-and two-family dwellings."] **shall be deleted in its entirety and the following shall be inserted: “Detached one- and two-family dwellings and attached single-family townhouses are exempt from the seismic requirements of this code.” In addition, the exception shall be deleted in its entirety.**

[vi.] **v.** Section [R303.4]**R303.6**, Stairway illumination, **and Section R303.6.1, Light activation**, shall be deleted in [its] **their** entirety.

[vii. New Section R301.8, entitled "Residential Attics with trusses," from Section 1606.2.3 of the 1996 BOCA National Building Code, shall be inserted as follows:

"A storage live load shall be applied to those portions of the bottom chord of not less than two adjacent trusses with the same web configuration containing a rectangle 42 inches (1067 mm) high or greater by 2 feet (610 mm) wide or greater, located within the plane of the truss. The rectangle shall fit between the top of the bottom chord and the bottom of any other truss member, provided each of the following criteria are met:

(1) The attic area is accessible by a permanent stairway, pull down stairway, or scuttle opening meeting the size requirement specifications of Section R807, and

(2) The truss shall have a bottom chord pitch less than 2 in 12."]

[viii.] **vi.** Section [R303.6] **R303.8**, Required heating, shall be deleted in its entirety.

[ix. In Section R308.4, Hazardous locations, Item 9 shall be deleted. In the same section, Exception 9 shall be deleted.]

Renumber x. as vii. (No change in text.)

[xi.] **viii.** In Section R310.1, Emergency escape and rescue required, "Basements with habitable spaces and" shall be deleted. The sentence shall start with "Every." **In addition, in the third sentence, "but shall not be required in adjoining areas of the basement" shall be deleted. Finally, the exception shall be deleted in its entirety.**

[xii. In Section R314.2, Treads and risers, "7 3/4 inches (196 mm)" shall be deleted and "8 1/4 inches (210 mm)" shall be inserted. In the same section, "10 inches (254 mm)" shall be deleted and "nine inches (229 mm)" shall be inserted.

xiii. In Section R314.4, Winders, "10 inches (254 mm)" shall be deleted and "nine inches (229 mm)" shall be inserted.

xiv. In Section R314.6, Circular stairways, "six inches (152 mm)" shall be deleted and "nine inches (229 mm)" shall be inserted.

xv. Section R314.7, Illumination, shall be deleted in its entirety.

xvi. Section R315.1 shall be deleted and Section 315.1, Handrails, of the 1995 edition of the Council of American Building Officials One-and Two-Family Dwelling Code (1995 CABO One-and Two-Family Dwelling Code) shall be inserted as follows:

"Handrails. Handrails having minimum and maximum heights of 30 inches and 38 inches (762 mm and 965 mm), respectively, measured vertically from the nosing of the treads, shall be provided on at least one side of stairways of three or more risers. Spiral stairways shall have the required handrail located on the outside of the radius. All required handrails shall be continuous the full length of the stairs. Ends shall be returned or shall terminate the newel posts or safety terminals. Handrails adjacent to a wall shall have a space not less than 1 1/2 inches (38 mm) between the wall and the handrail.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post at a turn.
2. The use of a volute, turnout, or starting easing shall be allowed over the lowest tread."

xvii. Section R316.2, Guard opening limitations, "Required guards shall not be constructed with horizontal rails or other ornamental patterns that result in a ladder effect." shall be deleted in its entirety.]

ix. In Section R311.4.3, Landings at doors, in Exception 2 and Exception 3, "7 ¾ inches (196 mm) " shall be deleted and "8 1/4 inches (210 mm)" shall be inserted.

x. In Section R 311.5.3.1, Riser height, in the first sentence, "7 ¾ inches (196 mm)" shall be deleted and "8 1/4 inches (210 mm)" shall be inserted.

xi. In Section 311.5.3.2, Tread depth, in the first sentence, "10 inches (254 mm)" shall be deleted and "9 inches (229 mm)" shall be inserted . In addition, in the fourth sentence, "10 inches (254 mm)" shall be deleted and "9 inches (229 mm)" shall be inserted.

xii. In Section R311.5.6.1, Height, "34 inches (864 mm)" shall be deleted and "30 inches (762 mm)" shall be inserted.

xiii. In Section 311.5.6.3, Handrail grip size, Item 1 shall be deleted in its entirety and Section R315.2 of the 2000 edition of the International Residential Code shall be inserted as follows:

"Type 1. The handgrip portion of Type 1 handrails shall have a circular cross section of 1¼ inches (32 mm) minimum to 2 5/8 inches (67 mm) maximum. Other handrail shapes that provide an equivalent grasping surface are permissible. Edges shall have a minimum radius of 1/8 inch (3.2 mm)."

xiv. Section R311.5.7, Illumination, shall be deleted in its entirety.

[xviii.] **xv.** Section [R317.1.1] **R313.2.1**, Alterations, repairs and additions, shall be deleted in its entirety.

[xix.] **xvi.** In Section [R317.2] **R313.3** , Power source, "Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or in buildings that undergo alterations, repairs, or additions regulated by Section [R317.1.1.] **R313.1.1**" shall be deleted.

xvii. Section R311.6.1, Maximum slope, shall be deleted in its entirety.

[xx.] **xviii.** In Section [R321.1] **R317.1**, Dwelling unit separation, **in Exception 1**, "13R, or 13D" shall be inserted after "NFPA 13."

xix. In Section R317.2, Townhouses, in the second sentence of the exception, "Chapters 33 through 42" shall be deleted and " the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

[xxi.] **xx.** In Section [R322.1] **R318.1**, Moisture control, [Exception 3 shall be deleted.] **in Exception 3, "in climate zones 1 through 4 in Table N1101.2" shall be deleted and "HDD 4500-5499 in accordance with the energy subcode (N.J.A.C. 5:23-3.18)."**

[xxii.] **xxi.** Section [R325.1] **R321.1**, Site address, shall be deleted in its entirety.

xxii. Section R322, Accessibility, shall be deleted in its entirety.

xxiii. Section R323, Elevators and platform lifts, shall be deleted in its entirety.

xxiv. In Section R324.1.5, Protection of mechanical and electrical systems, the second sentence shall be deleted in its entirety.

xxv. In Section R324.1.6, Protection of water supply and sanitary sewage systems, in the first and second sentences, “and replacement” shall be deleted.

[xxiii.] **xxvi.** In Section [R327.1.8] **R324.1.8**, Manufactured housing, **in the first sentence, “or replacement” and** "and the anchor and tie-down requirements of Section AE604 and AE605 of Appendix E shall apply" shall be deleted.

xxvii. Section R324.3.6, Construction Documents, shall be deleted in its entirety.

xxviii. New Section R325 entitled, “Carbon Monoxide Alarms,” shall be inserted as follows:

“R325 Carbon monoxide alarms. Single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in any dwelling unit if the dwelling unit contains a fuel-burning appliance or has an attached garage. An "open parking structure," as defined in the building subcode, shall not be deemed to be an attached garage.”

4. Chapter 4, Foundations shall be amended as follows:

i. In Table R401.4.1, Presumptive Load Bearing Values of Foundation Materials, "12,000; 4,000; 3,000; 2,000; and 1,500[b]" shall be deleted and "12,000; 6,000; 5,000; 3,000; and 2,000" shall be inserted.

[ii. In Section R403.3.2 of the IRC/2000, Drainage, in the second sentence, "as detailed in Table 405.1" shall be deleted.]

ii. In Section 403.1.4.1, Frost protection, the exception shall be deleted and the following shall be inserted in its place:

Exception: Free standing buildings meeting all of the following conditions shall not be required to be protected:

1. Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to, agricultural buildings, temporary buildings and minor storage facilities.

2. Area of 600 square feet (56 m²) or less for light framed construction, or 400 square feet (37 m²) or less for other than light-framed construction; and

3. Eave height of 10 feet (3048 mm) or less.

iii. – iv. (No change.)

v. Sections R405, Foundation Drainage **with the exception of Table R405.1**, and R406, Foundation Waterproofing and Dampproofing, shall be deleted and the text of Section [1806] **1807**, Dampproofing and Waterproofing from the International Building Code (IBC)/[2000] **2006** shall be inserted as follows:

"R406.1 Where required. Walls or portions thereof that retain earth and enclose interior spaces and floors below grade shall be waterproofed and dampproofed in accordance with this section, with the exception of those spaces containing groups other than residential and institutional where such omission is not detrimental to the building or occupancy.

R406.1.1 STORY ABOVE GRADE. -- Where a basement is considered a story above grade and the finished ground level adjacent to the basement wall is below the basement floor elevation for 25 percent or more of the perimeter, the floor and walls shall be dampproofed in accordance with Section R406.2 and a foundation drain shall be installed

in accordance with Section R406.4.1. The foundation drain shall be installed around the portion of the perimeter where the basement floor is below ground level. The provisions of Sections R406.3 and R406.4.1 shall not apply in this case.

R406.1.2 UNDERFLOOR SPACE. -- The finished ground level of an underfloor space such as a crawl space shall not be located below the bottom of the footings. Where there is evidence that the ground water table rises to within six inches (152 mm) of the ground level at the outside building perimeter or where there is evidence that the surface water does not readily drain from the building site, the ground level of the underfloor space shall be as high as the outside finished ground level, unless an approved drainage system is provided. The provisions of Sections R406.2, R406.3 and R406.4 shall not apply in this case.

R406.1.2.1 FLOOR HAZARD AREAS. -- For buildings and structures in flood hazard areas as established in Section R327, the finished ground level of an underfloor space such as a crawl space shall be equal to or higher than the outside finished ground level.

Exception: Under-floor spaces that meet the requirements of FEMA/FIA-TB-11.

R406.1.3 GROUNDWATER CONTROL. -- Where the groundwater table is lowered and maintained at an elevation not less than 6 inches (152 mm) below the bottom of the lowest floor, the floor and walls shall be dampproofed in accordance with Section R406.2. The design of the system to lower the groundwater table shall be based on accepted principles of engineering that shall consider, but not necessarily be limited to, permeability of the soil, rate at which water enters the drainage system, rated capacity of

pumps, head against which pumps are to pump; and the rated capacity of the disposal area of the system.

R406.2 DAMPPROOFING REQUIRED. -- Where hydrostatic pressure will not occur, floors and walls for other than wood foundation systems shall be dampproofed in accordance with this section. Wood foundation systems shall be constructed in accordance with AFPA TR7.

R406.2.1 FLOORS. -- Dampproofing materials for floors shall be installed between the floor and the base course required by Section R406.4.1, except where a separate floor is provided above a concrete slab.

Where installed beneath the slab, dampproofing shall consist of not less than six-mil (0.006 inch; 0.152 mm) polyethylene with joints lapped not less than six inches (152 mm), or other approved methods or materials. Where permitted to be installed on top of the slab, dampproofing shall consist of mopped-on bitumen, not less than four-mil (0.004 inch; 0.102 mm) polyethylene, or other approved methods or materials. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.2.2 WALLS. -- Dampproofing materials for walls shall be installed on the exterior surface of the wall, and shall extend from the top of the footing to above ground level.

Dampproofing shall consist of a bituminous material, three pounds per square yard (16N/ m²).of acrylic modified cement, -inch (3.2 mm) coat of surface-bonding mortar complying with ASTM C 887, any of the materials permitted for waterproofing by Section R406.3.2, or other approved methods or materials.

R406.2.2.1 SURFACE PREPARATION OF WALLS. -- Prior to application of dampproofing materials on concrete walls, holes and recesses resulting from the removal of form ties shall be sealed with a bituminous material or other approved methods or materials. Unit masonry walls shall be parged on the exterior surface below ground level with not less than inch (9.5 mm) of Portland cement mortar. The parging shall be coved at the footing.

Exception: Parging of unit masonry walls is not required where a material is approved for direct application to the masonry.

R406.3 WATERPROOFING REQUIRED. -- Where the groundwater investigation indicates that a hydrostatic pressure condition exists, and the design does not include a groundwater control system as described in Section R406.1.3, walls and floors shall be waterproofed in accordance with this section.

R406.3.1 FLOORS. -- Floors required to be waterproofed shall be of concrete, designed and constructed to withstand the hydrostatic pressures to which the floors will be subjected.

Waterproofing shall be accomplished by placing a membrane of rubberized asphalt, butyl rubber, or not less than six-mil polyvinyl chloride with joints lapped not less than six inches (152 mm) or other approved materials under the slab. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.3.2 WALLS. -- Walls required to be waterproofed shall be of concrete or masonry and shall be designed and constructed to withstand the hydrostatic pressures and other lateral loads to which the walls will be subjected.

Waterproofing shall be applied from the bottom of the wall to not less than 12 inches (305 mm) above the maximum elevation of the ground water table. The remainder of the wall shall be dampproofed in accordance with Section R406.2.2. Waterproofing shall consist of two-ply hot-mopped felts, not less than six-mil (0.006 inch; 0.152 mm) polyvinyl chloride, 40-mil (0.040 inch; 1.02 mm) polymer-modified asphalt, six-mil (0.006 inch; 0.152 mm) polyethylene or other approved methods or materials capable of bridging nonstructural cracks. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.3.2.1 SURFACE PREPARATION OF WALLS. -- Prior to the application of waterproofing materials on concrete or masonry walls, the walls shall be prepared in accordance with Section R406.2.2.1.

R406.3.3 JOINTS AND PENETRATIONS. -- Joints in walls and floors, joints between the wall and floor, and penetrations of the wall and floor shall be made watertight utilizing approved methods and materials.

R406.4 SUBSOIL DRAINAGE SYSTEM. -- Where a hydrostatic pressure condition does not exist, dampproofing shall be provided and a base shall be installed under the floor and a drain installed around the foundation perimeter. A subsoil drainage system designed and constructed in accordance with Section R406.1.3 shall be deemed adequate for lowering the groundwater table.

R406.4.1 FLOOR BASE COURSE. -- Floors of basements, except as provided for in Section R406.1.1, shall be placed over a floor base course not less than four inches (102 mm) in thickness that consists of gravel or crushed stone containing not more than 10 percent of material that passes through a No. 4 (4.75 mm) sieve.

Exception: Where a site is located in well-drained gravel or sand/gravel mixture soils, a dedicated drainage system is not required.

R406.4.2 FOUNDATION DRAIN. -- A drain shall be placed around the perimeter of a foundation that consists of gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 (4.75 mm) sieve. The drain shall extend a minimum of 12 inches (305 mm) beyond the outside edge of the footing. The thickness shall be such that the bottom of the drain is not higher than the bottom of the base under the floor, and that the top of the drain is not less than six inches (152 mm) above the top of the footing. The top of the drain shall be covered with an approved filter membrane material. Where a drain tile or perforated pipe is used, the invert of the pipe or tile shall not be higher than the floor elevation. The top of joints or the top of perforations shall be protected with an approved filter membrane material. The pipe or tile shall be placed on not less than two inches (51 mm) of gravel or crushed stone complying with Section R406.4 and shall be covered with not less than six inches (152 mm) of the same material.

R406.4.3 DRAINAGE DISCHARGE. -- The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the plumbing subcode.

Exception: Where a site is located in well-drained gravel or sand/gravel mixture soils, a dedicated drainage system is not required."

vi. In Section R408.3, Unvented crawl space, in Condition 2.1 and Condition 2.2, "Section N1102.2.8" shall be deleted and "the energy subcode (N.J.A.C. 5:23-3.18)" shall be inserted.

5. (No change.)

6. Chapter 6, Wall Construction, shall be amended as follows:

i. In Figure R602.6.1, Notching and Bored Hole Limitations for Exterior Walls and Bearing Walls, "[six] **eight**-16 penny nails" shall be deleted and "three-8d nails" shall be inserted.

ii. In Section R602.6.1, Drilling and notching of top plate, “eight-16d nails” shall be deleted and “three-8d” nails shall be inserted.

[ii In Table R602.10.1, Wall Bracing, under the column "Seismic Design Category or Wind Speed," at Category D₁ and D₂, "less than 110 mph" shall be deleted and "less than 120 mph" shall be inserted. In addition, the fourth row of Table R602.10.1 shall be deleted in its entirety.]

iii. – iv. (No change.)

7. Chapter 8, Roof-Ceiling Construction, shall be amended as follows:

i. (No change.)

ii. New Section [802.10.5] **802.10.6**, entitled "Truss Identification," shall be inserted as follows: "Each truss shall be labeled or otherwise indelibly marked at the factory with the individual truss number as assigned in the truss layout plan. The indelible marking or label shall be located on the bottom chord of the truss, inside the bearing points. When indelible markings are used, each digit shall be not less than one inch high. When labels are used, the label shall be a minimum of five inches by three inches and shall be affixed to the truss by a truss plate. Labels shall remain affixed to the truss."

[iii. Table R802.11, Required Strength of Truss or Rafter Tie-Down Connections to Resist Wind Uplift Forces^{a,b,c,d} shall be deleted and the following shall be inserted:

"Required Strength of Truss or Rafter Tie-Down Connections
to Resist Wind Uplift Forces<a>, , <c>, <d>
(Pounds per tie-down connection)

Design Wind Load (psf) d	Total Roof Width Including Overhang (feet)				
	24	28	32	36	40
20	192	224	256	288	320
30	432	504	576	648	720
40	672	784	895	1,008	1,120
50	912	1,064	1,216	1,368	1,520
60	1,152	1,344	1,536	1,728	1,920
70	1,392	1,624	1,856	2,088	2,320
80	1,632	1,904	2,176	2,448	2,720
90	1,872	2,184	2,496	2,808	3,120

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kN/m², 1 pound = 0.454 kg.

a. Wind uplift forces are based on 24-inch spacing of roof trusses or rafters. For spacing other than 24 inches, forces shall be adjusted accordingly.

b. Interpolation is permitted for intermediate values of wind uplift pressures and roof widths.

c. The rated capacity of approved tie-down devices is permitted to include up to a 60-percent increase for wind effects where allowed by material specifications.

d. Figure R301.2(4) and Table R301.2(2) shall be used in determining the design wind load."]

iii. In Section R806.4, Condition attic assemblies, in Condition 2, the exception shall be deleted. In addition, Condition 3 shall be deleted. Finally, in Condition 4, "In Zones 3 through 8 as defined in Section N1101.2" shall be deleted and Condition 4 shall be renumbered as Condition 3.

iv. In Section R808.1, Combustible insulation, in the second paragraph, "Section N1102.4.3" shall be deleted and "the energy subcode, N.J.A.C. 5:23-3.18" shall be inserted.

8. Chapter 9, Roof Assemblies, shall be amended as follows:

i. In Sections 905.2.7, 905.4.3.1, 905.5.3, 905.6.3.1, 905.7.3.1 and 905.8.3.1 in the first sentence, delete “In areas where there has been a history of ice forming along the eaves causing a back-up of water as designated in table R301.2(1)”, and “In areas where the average daily temperature in January is 25°F (-4°C) or less,” shall be inserted.

[8.] **9.** Chapter 10, Chimneys and Fireplaces, shall be amended as follows:

i. In Section R1001.11, Fireplace clearance, Exception 3, "12 inches" shall be deleted and "six inches" shall be inserted.

[i.] **ii.** In Section [R1001.15] **R1003.18**, Chimney clearances, Exception 3, "12 inches" shall be deleted and "six inches" shall be inserted.

[ii.] **iii.** In Figure [1001.15] **R1003.18**, Clearance from Combustibles, "12 IN. [MIN.]" shall be deleted and "6 IN. [MIN.]" shall be inserted.

[iii. In Section R1003.12, Fireplace clearance, Exception 3, "12 inches" shall be deleted and "six inches" shall be inserted.]

Renumber 9. as 10. (No change in text.)

11. Chapter 12, Mechanical Administration, shall be amended as follows:

i. Section M1202, Existing mechanical systems, shall be deleted in its entirety.

[10.] **12.** Chapter 13, General Mechanical System Requirements, shall be amended as follows:

i. In Section M1305.1.3.1, Electrical requirements, “Chapter 38” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

ii. In Section M1305.1.4.3, Electrical requirements, “Chapter 38” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

iii. Section M1307.4, Hydrogen generating and refueling operations, shall be deleted in its entirety and the following shall be inserted:

M1307.4 Hydrogen generating and refueling operations. The installation of hydrogen fuel cell systems shall be installed in accordance with the applicable requirements of the International Fire Code, the International Building Code, the International Mechanical Code and the International Fuel Gas Code.

iv. In Section 1307.5, Electrical appliances, “Chapters 33 through 42” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted at the end of the sentence.

[i.] **v.** Add new [section M1307.5] **Section M1307.6** as follows:

[M1307.5] **M1307.6** Safety devices and controls. Oil burners, other than oil stoves with integral tanks, shall be provided with means for manually stopping the flow of oil to the burner. Such device or devices shall be placed in a readily accessible location a minimum of 10 feet from the burner. For electrically driven equipment, an identified switch in the burner supply circuit shall be provided at the entrance to the room or area where the appliance is located or, for equipment located in basements, the switch is required to be located at the top of stairs leading to the basement. An identifiable valve in the oil supply line, operable from a location a minimum of 10 feet from the burner, shall be used for other than electrically driven or controlled equipment.

[11. Chapter 12, Mechanical Administration, shall be amended as follows:

i. Section M-1202, Existing Mechanical Systems, shall be deleted in its entirety.]

13. Chapter 14, Heating and Cooling Equipment, shall be amended as follows:

i. Chapter M1401.3, Sizing, “When provided,” shall be inserted at the being of the sentence.

ii. In Section M1405.1, General, “Chapters 33 through 42” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

iii. In Section M1406.1, General, “Chapters 33 through 42” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16) ” shall be inserted.

iv. In Section M1406.2, Clearances, “Chapters 33 through 42” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16) ” shall be inserted.

v. In Section M1407.1, General, “Chapters 33 through 42” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

vi. In Section M1411.3, Condensate disposal, in the first sentence, “in accordance with the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted after “disposal.”

vii. Section M1411.3.2, Drain pipe materials and sizes, shall be deleted in its entirety.

viii. In Section M1413.2, Protection of potable water, “Section P2902” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15) ” shall be inserted.

14. Chapter 18, Chimney and Vents, shall be amended as follows:

i. In Section M1801.3.2, Flue passageways, in the first sentence, “free of obstructions and combustible deposits” shall be deleted and “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d)” shall be inserted.

15. Chapter 20, Boilers/Water Heaters, shall be amended as follows:

i. In Section M2004.1, General, “Chapter 28” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

ii. In Section M2005.3, Electric water heaters, “Chapters 33 through 42” shall be deleted and “the electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

16. Chapter 21, Hydronic Piping, shall be amended as follows:

i. In Section M2101.2, System drain down, “Chapters 25 through 32” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

ii. In Section M2101.3, Protection of potable water, “Section P2902” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

17. Chapter 23, Solar Systems, shall be amended as follows:

i. In Section M2301.5, Backflow protection, “Section P2902” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

[12.] 18. [Part VI,] Chapter 24, Fuel Gas, shall be amended as follows:

i. (No change.)

ii. Section G2403, entitled "General Definitions" shall be amended as

follows:

(1) The definition of “approved” shall be deleted.

[(1)] **(2)** The definition **of** "code" shall be deleted.

Renumber (2) as (3) (No change in text.)

[(3) In the definition of "labeled," "authority having jurisdiction" shall be deleted and "construction official" shall be inserted.

(4) In the definition of "listed," "authority having jurisdiction" shall be deleted and "Uniform Construction Code (N.J.A.C. 5:23)" shall be inserted.]

iii. In Section G2404.3, Listed and labeled, in the first sentence, “Section R104.11” shall be deleted and “N.J.A.C. 5:23-3.7” shall be inserted. In addition, the last sentence shall be deleted.

Renumber iii. – iv. as iv. – v. (No change in text.)

[v. Section G2409, Clearance Reduction, shall be amended as follows:

(1) In Section G2409.4, Central heating boilers and furnaces, "G2409.4.1 through G2409.4.7" shall be deleted and "G2409.4.1 through G2409.4.5 and G2409.4.7" shall be inserted.

(2) Section G2409.4.6, Unlisted central heating furnaces, shall be deleted in its entirety.]

vi. In Section G2410.2, Connections, “Chapters 33 through 42” shall be deleted and “the Electrical subcode (N.J.A.C. 5:23-3.16)” shall be inserted.

[vi.] **vii.** Section [G2411.2] **G2412.2**, Liquefied petroleum gas storage, shall be amended as follows: [“Delete in its entirety Section 3-2.5, entitled 'Installation of Containers on Roofs of Buildings' in NFPA 58, 1998 Edition. The installation of LP Gas containers on roofs of buildings shall be strictly prohibited." shall be inserted after the first sentence.] **Notwithstanding the provisions contained in NFPA 58, the**

installation of LP-Gas containers on roofs of buildings shall be strictly prohibited.

viii. Section G2412.3, Modifications to existing system, shall be deleted in its entirety.

[vii.] **ix.** Section [G2413.3]**G2414.3**, Other materials, shall be deleted in its entirety.

x. In Section G2425.15.2, Flue passageways, in the first sentence, “free of obstructions and combustible deposits” shall be deleted and “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d)” shall be inserted.

[viii.] **xi.** In Section [G2426.5.5] **G2427.5.5**, Inspection of chimneys, "**examined to ascertain that it is** clear and free of obstructions" shall be deleted and "inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20[(c)](**d**)" shall be inserted. [In the same section, the exception shall be deleted in its entirety.]

xii. In Section G2448.1.1, Installation requirements, “this code” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

xiii. In Section G2448.2, Water heaters utilized for space heating, “this code” shall be deleted and “the plumbing subcode (N.J.A.C. 5:23-3.15)” shall be inserted.

[13.] **19.** [Part VII, Plumbing,] **Chapters 25 through 32** shall be deleted in [its] **their** entirety. Plumbing requirements under the scope of this subcode shall be regulated by the plumbing subcode.

[14.] **20.** [Part VIII, Electrical,] **Chapters 33 through 42** shall be deleted in [its]

their entirety. Electrical requirements under the scope of this subcode shall be regulated by the electrical subcode.

[15.] 21. [Part IX], Chapter [42] 43, Referenced standards, shall be amended as follows:

i. Under the subheading, NFPA, "[NFPA 13-96, Installation of Sprinkler Systems," shall be deleted and "NFPA 13-99, Installation of Sprinkler Systems;] NFPA [13D-99] 13D-02, Installation of Sprinkler Systems in One-and Two-Family Dwellings and Manufactured Homes; and NFPA [13R-99] 13R-02, Installation of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height" shall be inserted.

[16.] 22. The Appendices shall be amended as follows:

i. [In] Appendix A, Sizing and Capacities of Gas Piping[, at Letters (e) and (d), "authority having jurisdiction" shall be deleted and "construction official" shall be inserted] ; **Appendix B, Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances, and Appliances Listed for Use with Type B Vents; and Appendix C, Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems are informative and are not part of the one- and two-family dwelling subcode.**

ii. Appendix D, Recommended Procedure for Safety Inspection of an Existing Appliance Installation: Appendix E, Manufactured Housing Used as Dwellings: and Appendix F, Radon Control Methods, are deleted in their entirety.

[iii. In Appendix G, Section AG102.1, General, the definition of

“swimming pool” shall be deleted and the following shall be inserted: “Any structure intended for swimming or recreational bathing that can hold water 24 inches (610mm) or more in depth. This includes in-ground, above-ground, on-ground swimming pools, hot tubs, and spas.”]

Renumber iv. as iii. (No change in text.)

[v.] **iv.** [In] Appendix G **Swimming pools, Spas and hot tubs, shall be adopted as part of this subcode and** [,] Section AG105.2, Outdoor swimming pool, Provision 9 shall be deleted in its entirety. In the same section, under Provision 10, Item 10.1 shall be deleted. **In addition,** Item 10.2 shall be renumbered as 10.1 **and the last sentence shall be deleted. In addition, Section AG106, Entrapment protection for swimming pool and spa suction outlets, shall be deleted.**

v. Appendix H, Patio Covers, and Appendix K, Sound Transmission, shall be adopted as part of this subcode.

[v.] **vi.** [Appendix H, Patio Covers;] Appendix I, Private Sewage Disposal; [and] Appendix J, Existing Buildings and Structures; **Appendix L, Permit Fees; Appendix M, Home Day Care – R-3 Occupancy; Appendix N, Venting Methods; Appendix O, Gray Water Recycling Systems; Appendix P, Sprinkling; and Appendix Q, ICC International Residential Code Electrical Provisions/National Electrical Code Cross-Reference** shall be deleted in their entirety.

5:23-3.22 Fuel gas subcode

(a) Rules concerning the subcode adopted are as follows:

1. Pursuant to authority of P.L. 1975, c.217, the Commissioner hereby adopts the model code of the International Code Council, Inc., known as the International Fuel Gas Code/[2003] **2006**. This code is hereby adopted by reference as the fuel gas subcode for the State of New Jersey subject to the modifications in (b) below.

i. (No change.)

ii. The International Fuel Gas Code/[2003] **2006** may be known and cited as the "fuel gas subcode."

2. – 3. (No change.)

(b) The following chapters, sections or pages of the International Fuel Gas Code/[2003 are] **2006 shall be** amended as follows:

1. – 2. (No change.)

3. Chapter 3 of the fuel gas subcode, entitled "General Regulations," [is] **shall be** amended as follows:

i. (No change.)

ii. In Section 301.3, **Listed and labeled**, [delete] "in accordance with Section 105." **shall be deleted. In addition, the second sentence shall be in its entirety.**

iii. – iv. (No change.)

v. Section [307.1] **307.2, Fuel-burning appliances**, [is] **shall be** amended to [delete "approved plumbing fixture" on line 3 and] insert [the following:] "drywell, sump pump, floor drain, or drainage system below floor" **after "fixture."**

vi. Section [307. 2] **307.3, Drain pipe materials and sizes,** [is] **shall be** deleted.

4. Chapter 4 of the fuel gas subcode, entitled “Gas Piping Installation,” [is] **shall be** amended as follows:

[i. Add new Section 401.9 as follows:

401.9 Protection from vehicle impact. Gas meters, related regulators and piping that are installed indoors or outdoors and are subject to vehicle impact shall be protected by barriers meeting the requirements of Section 312 of the International Fire Code. For the purpose of applying this provision, "subject to vehicle impact" shall mean located within three feet of any garage door opening, driveway or designated parking area and not separated by a building wall from the space where a vehicle may be operated.

(1) Exception: If verification of the installation of an excess flow valve is provided by the gas utility, vehicle impact barriers shall not be required.]

[ii.] **i. Section 401.2, Liquefied petroleum gas storage,** [is] **shall be** amended to add the following: ["Delete in its entirety Section 3-2.5 "Installation of Containers on Roofs of Buildings" in NFPA--58, 1998 Edition. "Installation of LP-Gas containers on roofs of buildings shall be strictly prohibited.] **Notwithstanding the provisions contained in NFPA 58, the installation of LP-Gas containers on roofs of buildings shall be strictly prohibited.**

ii. Add new Section 401.9 as follows:

401.9 Protection from vehicle impact. Gas meters, related regulators and piping that are installed indoors or outdoors and are subject to vehicle impact shall be

protected by barriers meeting the requirements of Section 312 of the International Fire Code. For the purpose of applying this provision, "subject to vehicle impact" shall mean located within three feet of any garage door opening, driveway or designated parking area and not separated by a building wall from the space where a vehicle may be operated.

(1) Exception: If verification of the installation of an excess flow valve is provided by the gas utility, vehicle impact barriers shall not be required.

iii. (No change.)

5. Chapter 5 of the fuel gas code, entitled "Chimneys and vents," [is] shall be amended as follows:

i. In Section 501.15.2, Flue passageways, in the first sentence, "free of obstructions and combustible deposits" shall be deleted and "inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d)" shall be inserted.

[i.] ii. In Section 503.5.6, Inspection of chimneys, [delete "cleaned and free of obstructions"] "examined to ascertain that it is clear and free of obstructions" shall be deleted and [insert] "inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20 (d)[.]" shall be inserted.

[ii.] iii. In Section 503.5.6.1, Chimney lining, the exception [: Delete the exception] shall be deleted in its entirety.

6. Chapter 6 of the fuel gas code, entitled "Specific Appliances," [is] shall be amended as follows:

[i. Section 623.2 is deleted.

ii. Section 623.3 is deleted.

iii.] **i. Section 627.10, Switches in electrical supply line, [is] shall be**
deleted.

7. Chapter 8 of the fuel gas code, entitled “Referenced Standards,” [is] **shall be**
amended as follows:

i. Under the heading “ICC,” amend the following titles:

[(1) Delete "IBC--03, International Building Code" and insert
"IBC--00, International Building Code."]

[(2)] **(1)** Delete "ICC EC—[03] **06**, ICC Electrical Code."

[(3)] **(2)** Delete "IEBC—[03] **06**, International Existing Building
Code."

[(4)] **(3)** Delete "IECC—[03] **06**, International Energy
Conservation Code."

[(5) Delete "IFC--03, International Fire Code" and insert "IFC--00,
International Fire Code."]

[(6)] **(4)** Delete "IPC—[03] **06**, International Plumbing Code."

[(7) Delete "IRC--03, International Residential Code" and insert
"IRC--00, International Residential Code."]

8. – 9. (No change.)